

**HIV/AIDS PREVENTION AND CARE FOR LEARNERS IN A HIGHER
EDUCATION INSTITUTION IN LESOTHO**

‘MATEBOHO PATRICIA MPHANA

**THESIS SUBMITTED TO THE:
FACULTY OF HEALTH SCIENCES
UNIVERSITY OF STELLENBOSCH
NURSING DIVISION**

IN FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

MAGISTER CURATIONIS



SUPERVISOR: DR. ABEL J. PIENAAR

DECEMBER 2010

DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the authorship owner thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Date: _____

Copyright © 2010 Stellenbosch University
All rights reserved

DEDICATION

This study is dedicated to all young people who passed on due to HIV-related illnesses, as well as to all the young people who are either infected with or affected by HIV and all learners in NHTC who participated in this study and from whom insight into true experiences could be gained as well as to all of the NHTC learners from whom much inspiration was obtained for conducting this study.

ACKNOWLEDGEMENTS

I wish to express my gratitude to the following people for their assistance:

Dr. Abel Pienaar, my supervisor and co-coder in data analysis for the professional guidance and continuous support. Thank you for your patience and understanding, I could not have done this without you. May God bless you.

Theresa Bock, for supporting me throughout and translating my summary into Afrikaans at such a short notice. I really appreciate the assistance.

Thank you to the external language editor for suggesting changes in choice of words and correcting grammatical errors.

Mrs. Mantoa Molengoane, for assisting me with the statistical processing of quantitative data.

Ministry of Public Service and Ministry of Health and Social Welfare for allowing me time to study and the latter for allowing me to carry out this study under their Ministry.

Ministry of Finance and Development Planning – National Manpower Development Secretariat for the financial support.

National Health Training College and National AIDS Commission Library staff for their patience and support throughout the study.

My colleagues and friends, for being there for me when I needed you most.

‘M’e ‘Malisema, for looking after my family when I could not. Your assistance was highly appreciated.

My immediate family, David, my husband, Teboho and Mpho, my children, your support cannot be overemphasised.

My extended family, for believing in me and encouraging me throughout the study.

Lastly, to God almighty, for the wisdom, guidance and for sustaining me throughout my studies.

ABSTRACT

HIV/AIDS is considered as a global problem with the number of people living with HIV infection continuing to increase. At the end of 2007 HIV/AIDS had already claimed 25 million lives. Of all new HIV infections 71% were diagnosed in the Sub-Saharan region in 2008, remaining the worst affected region globally. UNAIDS (2008:43) indicated that heterosexual intercourse remained the main origin for HIV infection in the Sub-Saharan region. Therefore the researcher is of the opinion that prevention strategies should focus mainly on sexual transmission of the disease.

HIV/AIDS affects mainly people between the ages 15-24 years, notably the age group of most of the learners in Higher Education Institutions (HEIs). Lesotho, a country in the Sub-Saharan region, presents with the third highest HIV adult prevalence (23.2%) in the world and in the region.

In an attempt to address the prevailing situation, Lesotho has a number of programmes geared towards addressing HIV/AIDS in the country. However, all these attempts exclude the learners in HEIs, yet the majority of learners are found within the most affected age group. It is also to be noted that Higher Education provides the bedrock for socio-economic and political development in Africa.

Some studies have identified insufficient knowledge as being at the root of the increasing HIV infections among youth. However, other studies have shown that there is adequate knowledge among the young people, but still a challenge remains and that is to facilitate changes in behavioural patterns as a component to be linked to the knowledge.

Studies conducted in other African countries have shown that there are anti-AIDS programmes and clubs for learners in HEIs where learners are involved in the fight against HIV/AIDS. No publication indicating the same for Lesotho's HEIs could be found, except for the National University of Lesotho (NUL) that only launched its HIV/AIDS policy for learners in 2009. The researcher is of the opinion that HEIs in Lesotho are not doing enough to combat HIV/AIDS and hence intends to focus on HEIs in Lesotho.

This study had two objectives namely:

- To determine the knowledge of learners in a specific HEI in Lesotho regarding HIV/AIDS prevention and care.
- To explore the needs of learners in a specific HEI in Lesotho regarding HIV/AIDS prevention and care.

This mixed method study was conducted, comprising of both quantitative and qualitative designs. Quantitative phase used a questionnaire for determining the knowledge of learners. The questionnaire was adopted from a study that was performed to determine knowledge of South African educators in public schools with some modifications. The qualitative phase was used to explore the needs of the learners through the focus group discussions with the leaders of the learners. Sample was drawn from the entire population using stratified random sampling for the quantitative phase. The qualitative phase used the purposive sampling to obtain in-depth information concerning learners' needs. Quantitative data was analysed through the use of statistical package for social sciences (SPSS) and qualitative data was analysed using the thematic analysis and open-coding. All ethical principles were adhered to especially the principle of respect for persons.

The findings from the quantitative phase of the study showed that learners had adequate knowledge regarding HIV/AIDS prevention and care and the findings from the qualitative phase showed the various needs of the learners with regards to prevention and care of HIV/AIDS in a specific HEI in Lesotho. Recommendations have been proposed based on the findings from the two phases of the study. Limitations observed by the researcher have also been identified. In conclusion the objectives of the study were met and the research questions had been answered.

Opsomming

MIV/Vigs word as 'n internasionale probleem erken, siende dat daar 'n verhoging in die toename van MIV-geïnfekteerde individue tans is. Einde 2007 het MIV/Vigs reeds 25 miljoen lewens ge-eis. In 2008 is 71% van al die nuwe MIV-infeksies in die Sub-Sahara streek gediagnoseer, wat aandui dat die streek die mees geaffekteerde streek tans is. UNAIDS (2008:43) het aangedui dat heteroseksuele omgang die hooforsaak van MIV-oordrag in die Sub-Sahara-streek is. Laasgenoemde het daartoe gelei dat die navorser van mening is dat voorkomende strategieë meestal op seksuele oordrag van die siekte moet fokus.

MIV/Vigs affekteer meestal mense in die ouderdomsgroep 15-24, opmerklik is dit die ouderdomsgroep waarby meesle leerders in Hoërondewysinstellings (HOI) is. Lesotho, 'n land in die Sub-Sahara-streek, het tans die derde-hoogste MIV-voorkoms (23.2%) in die wêreld en in die streek.

Lesotho het verskeie programme ontlont om MIV/Vigs te bekamp in 'n poging om die huidige situasie te beredder. Nieteenstaande sluit al die programme leerders in HOI uit, alhoewel die leerders in die ouderdomsgroep van die mees-geaffekteerde groep val. Dit is ook duidelik dat Hoërondewys die fondasie vir sosio-ekonomiese- en politieke ontwikkeling in Afrika verskaf.

Sommige studies het onvoldoende kennis as die wortel van die verhoging van MIV-infeksies onder die jeug geïdentifiseer. Ander studies, daarenteen, wys dat kennis voldoende is onder jeug, alhoewel veranderinge in gedragspatrone om by die kennis aan te sluit 'n uitdaging bly.

Studies uit ander Afrikalande dui daarop dat daar anti-Vigs programme en klubs is waarby HO leerders betrokke is om teen die verspreiding van MIV/Vigs te veg. Geen publikasies in hierdie verband word in Lesotho aangetref nie, behalwe 'n MIV/Vigs-beleid wat in 2009 deur "National University of Lesotho" (NUL) gepubliseer is. Dus is die navorser van mening dat HOI nie genoeg doen om MIV/Vigs te beveg nie, daarom fokus sy op HOI in Lesotho.

Hierdie studie het twee doelstellings ten doel gehad, naamlik om die leerders in 'n sekere HOI in Lesotho se kennis aangaande MIV/Vigs voorkoming en sorg te bepaal en die behoeftes van die leerders aangaande MIV/Vigs voorkoming en sorg te verken. 'n Studie met beide kwantitatiewe- en kwalitatiewe metodes is gebruik om die doelstellings te verwesenlik. In die kwantitatiewe fase is 'n vraelys gebruik om leerders se kennis te bepaal. Die vraelys is verkry uit 'n vorige studie wat in RSA gedoen is, maar aangepas om in die Lesotho-konteks te gebruik. Gedurende die kwalitatiewe fase is fokusgroep besprekings met die leiers van die leerders gehou om die behoeftes indiepte te verken. Die steekproef was uit die totale populasie getrek deur van gestratifiseerde streekproefneming gebruik te maak in die kwantitatiewe fase en 'n doelgerigte steekproefneming is in die kwalitatiewe fase te gebruik. Die navorser het 'n kwantitatiewe data-analise sagteware (SPSS)gebruik om kwantitatiewe data te ontleed en tematiese oopkodering is gedurende die kwalitatiewe fase gebruik. Etiese kode is ten volle gerespekteer, veral die respek vir mense gedurende navorsing.

Bevindinge van die kwantitatiewe fase het bewys dat leerders voldoende kennis aangaande die voorkoming en sorg van MIV/Vigs besit en die kwalitatiewe bevindinge het die behoeftes van leerders met betrekking tot die voorkoming en sorg van MIV/Vigs in 'n spesifieke HOI in Lesotho geopenbaar. Die aanbevelings is gemaak, gebaseer op die bevindinge uit die twee fases. Beperkings in die studie is uitgelig. Ter afsluiting is die doelstellings in die studie bereik en die navorsingsvrae beantwoord.

LIST OF ACRONYMS AND ABBREVIATIONS

1. AIDS – Acquired Immunodeficiency Syndrome
2. AMDC – Apprentice Management Development Consultants
3. AVERT – International AIDS charity based in Britain
4. BCM – Baylor College of Medicine
5. CHE – Council of Higher Education
6. COSC – Cambridge Overseas School Certificate
7. CRS – Catholic relief services
8. ELRC – Education Labour Relations Council
9. GOL – Government of Lesotho
10. HIV – Human Immunodeficiency Virus
11. HSRC – Human Sciences Research Council
12. HTC – HIV Testing and counselling
13. IDUs – Injecting drug users
14. IIEP – International Institute for Educational Planning
15. ILO – International Labour Organisation
16. MoET – Ministry of Education and Training
17. MoFDP – Ministry of Finance and Development Planning
18. MOHSW – Ministry of Health and Social Welfare
19. MSM – Men who have sex with other men
20. NAC – National AIDS Commission
21. PEP – Post-exposure Prophylaxis
22. PMTCT – Prevention of mother-to-child transmission
23. ‘sa’ – sino anno (no date of publication)
24. SAfAIDS – Southern Africa HIV and AIDS Information Dissemination Service
25. SEARO – Regional office of the South-East Asia
26. ‘sl’ – sino loco (no place of publication)
27. ‘sn’ – no publisher
28. SU;OIHC – Stellenbosch University; Office for Institutional HIV Co-ordination
29. TB – Tuberculosis
30. UNAIDS – Joint United Nations Programme on HIV /AIDS
31. UNESCO – United Nations Education, Science and Cultural Organisation

- 32. UNGASS – United Nations General Assembly Special Session
- 33. WGHE – Working Group on Higher Education
- 34. WHO – World Health Organization

TABLE OF CONTENT

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	v
OPSOMMING	vi
LIST OF ACRONYNS AND ABBREVIATIONS	viii
TABLE OF CONTENT	x

CHAPTER 1 – INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 Introduction	1
1.2 Background	1
1.3 Research problem	4
1.4 Research questions	4
1.5 Research aim	4
1.6 Objectives	4
1.7 Research statement	4
1.8 Brief discussion of research methodology	5
1.9 Research outcome	6
1.10 Significance of the study	6
1.11 Definitions	7
1.12 Layout of the chapters of the thesis	8
1.13 Summary of the chapter	8

CHAPTER 2 – LITERATURE REVIEW

2.1 Introduction	9
2.2 HIV prevalence	9

2.3 Transmission of HIV infection	11
2.3.1 Sexual transmission of HIV	11
2.4 Knowledge related to HIV infection among learners in HEIs	12
2.5 HIV/AIDS interventions in HEIs	13
2.6 Summary of the chapter	15

CHAPTER 3 – RESEARCH METHODOLOGY

3.1 Introduction	16
3.2 Research design	16
3.2.1 Data collection Phase 1 – Quantitative design	17
3.2.1.1 Population	17
3.2.1.2 Sample	18
3.2.1.3 Sampling	18
3.2.1.4 Recruitment of participants	19
3.2.1.5 Data collection	20
3.2.1.6 Data analysis	20
3.2.1.7 Pilot study	20
3.2.1.8 Reliability	21
3.2.1.9 Validity	21
3.2.1.10 Data collection devices	22
3.2.2 Data collection Phase 2 – Qualitative design	22
3.2.2.1 Population	23
3.2.2.2 Sample and sampling	23
3.2.2.3 Data collection	24
3.2.2.4 Trustworthiness	25
3.2.2.5 Data collection devices	26
3.2.2.6 Data analysis	27
3.3 Ethical considerations	28
3.4 Chapter summary	29

CHAPTER 4 –PRESENTATION AND DISCUSSION OF THE RESULTS

4.1 Introduction	30
------------------	----

4.2 Research Findings	31
4.2.1 Results of phase 1 of the study	31
4.2.1.1 Brief description of the population and sampling	31
4.2.1.2 Research findings and discussion of of the results of Phase 1	33
4.2.2 Research findings of Phase 2 and literature control	58
4.2.2.1 Description of the setting	58
4.2.2.2 Research findings of Phase 2 of the study	59
4.3 Triangulation of the quantitative and qualitative phase of the study	80
4.4 Summary of the chapter	81

CHAPTER 5 – RECOMMENDATIONS, LIMITATIONS AND CONCLUSION

5.1 Introduction	84
5.2 Recommendations	84
5.2.1 HIV programme for learners	85
5.2.2 HIV/AIDS policy for the learners	85
5.2.3 HIV/AIDS education	86
5.2.4 Life-skills education	87
5.2.5 Improvement of the sporting and recreational facilities	87
5.2.6 Availability of condoms	88
5.2.7 Establishment of Anti-AIDS associations for learners	88
5.2.8 HTC services	88
5.3 Limitations	89
5.4 Conclusion	90

LIST OF TABLES

TABLE 3.1 Table showing population breakdown of learners	19
TABLE 4.1 The number of participants according to programm and year of study	32

LIST OF FIGURES

Figure 1 - Population breakdown	31
Figure 2 – There are HIV-positive people in your institution according to programme	34
Figure 3 – There are HIV-positive people in your institution according to year of study	35
Figure 4 – HIV can be prevented	36
Figure 5 – HIV transmission by using a cup or plate used by a person with HIV	37
Figure 6 – HIV transmission by sitting in a hot tub or swimming pool with a person who has HIV	37
Figure 7 – Having sex with a virgin can cure HIV/AIDS	38
Figure 8 – A pie chart showing the participants who answered “a person can be HIV-positive and still look healthy	39
Figure 9 – Coughing and sneezing can spread HIV	39
Figure 10 – Raped woman, HIV-positive mother and life-skills education	40
Figure 11 – A person can get HIV from oral sex according to programme	41
Figure 12 – A person can get HIV from oral sex according to year of study	42
Figure 13 – HIV transmission through breastfeeding according to programme	43
Figure 14 – HIV transmission through breastfeeding according to year of study	44
Figure 15 – Patients with TB also have HIV according to programme	45
Figure 16 – Patients with TB also have HIV according to year of study	46
Figure 17 – HIV-positive patients tend to have TB easily and HIV transmission through contact with blood	47
Figure 18 – Staying with HIV-positive colleague	48
Figure 19 – One partner is HIV-positive and the other partner is HIV-negative	49
Figure 20 – Health-care workers should report needle-pricks	50
Figure 21 – HTC is one of HIV prevention strategies according to programme	51
Figure 22 – HTC is one of HIV prevention strategies according to year of study	52

Figure 23 – Relationship with HIV-positive friend	53
Figure 24 – HIV as a chronic disease	54
Figure 25 – Once one has started taking ARV treatment for HIV, one has to take it for life according to programme	55
Figure 26 – Once one has started taking ARV treatment for HIV, one has to take it for life according to year of study	56
References	90

LIST OF APPENDICES

APPENDIX 1 – Approval letter from health research ethics committee	96
APPENDIX 2 – Approval letter from MOHSW (Lesotho)	97
APPENDIX 3 – Questionnaire (English)	98
APPENDIX 4 – Questionnaire (Sesotho)	104
APPENDIX 5 - Participants information leaflet and consent forms for the quantitative phase of the study (English version)	110
APPENDIX 6 - Participants information leaflet and consent forms for the qualitative phase of the study (English version)	116
APPENDIX 7 - Participants information leaflet and consent forms for the quantitative phase of the study (Sesotho version)	122
APPENDIX 8 - Participants information leaflet and consent forms for the qualitative phase of the study (Sesotho version)	128
APPENDIX 9 – Letter from the statistician	134

CHAPTER 1

INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 Introduction

HIV is considered as a global health problem and is estimated to have claimed 25 million lives at the end of 2007 (UNAIDS, 2008:31). This is a huge number considering that this pandemic was unknown 27 years ago (UNAIDS, 2008:31). In 2007 there were 2.7 million new HIV infections and 2 million deaths related to HIV globally. The pandemic disproportionately affects injecting drug users, men who have sex with other men (msm) and sex workers outside the Sub-Saharan Region. However in the Sub-Saharan region the HIV infection among heterosexual couples has escalated (WHO-SEARO, 2008:1). UNAIDS (2008:43) concurs and adds that heterosexual intercourse remains the main driving force behind HIV infection rates in the Sub-Saharan region.

The Sub-Saharan region is most heavily affected by HIV infection globally, followed by South-East Asia (WHO-SEARO, 2008:1). According to UNAIDS (2008:30) 67% of all people living with HIV and 75% of all AIDS deaths were in the Sub-Saharan Region in 2007 and of the 2.7 million new HIV infections worldwide, 1.9 million were in the Sub-Saharan Region in 2007 (UNAIDS, 2008:39).

1.2 Background

Lesotho, one of the countries in the Sub-Saharan Region, has the third highest adult HIV prevalence in the world and in the region (23.2%) with an estimated 62 new HIV infections and about 50 deaths due to AIDS each day in the age group 15-49 (CRS 2006:6; NAC et al., 2008:5). It is estimated that about 270 000 people lived with the HIV at the end of 2007, of these about 12 000 were children and 258 000 were adults. Females continue to be more frequently infected with an estimated 154 000 infected compared to 117 000 males (NAC et al., 2008:5). According to MOHSW (2006:7) the Government of Lesotho recognises that HIV/AIDS is not only a health problem but also a developmental one that has social, economic and cultural impacts.

Adding to the previous challenge GOL & UNAIDS (2004:20) concur that HIV&AIDS erodes Lesotho's greatest asset, its people. In this sense it threatens the country's very survival as a nation. It has been reported that one of the most frightening indicators of the effects of HIV/AIDS in Lesotho is the rapid decline in life expectancy (GOL & UNAIDS, 2004:21). According to MOHSW (2003:5) life expectancy had statistically reached 60.2 years in 1996 in Lesotho. GOL & UNAIDS (2004:21) further stated that before the onset of HIV/AIDS the average life expectancy was expected to increase to 60 years in 2003, but with the advent of HIV/AIDS it was estimated to be only 40 years in 2005 (GOL & UNAIDS, 2004:21). Life expectancy is estimated to fall further to 30 years by 2010 in the worst affected countries in Southern Africa (AMDC [sa]:9). Machobane & associates (2008:1) further indicated that life expectancy had dropped to about 36 years in Lesotho.

The recent statistical prevalence indicated that HIV/AIDS affected mostly the people in the 15-24 age group worldwide with about 50% of new infections affecting them (UNAIDS 2006:17), notably the age group of most learners in the Higher Education Institutions (HEIs). The previous statement was supported by Ochanda, Njima and Schneegan [sa] where they indicated that there was no other section of societies and communities that was hit harder by the HIV/AIDS pandemic than the HEIs. HIV-related illnesses have taken hundreds of learners and often their educators to an early grave (Ochanda et al., [sa]). IIEP (2008:25) on the other hand stated that higher education is not merely a capstone of the traditional education pyramid; but it is a critical pillar of human development worldwide. In addition Ochanda et al., [sa] indicated that HEI in Africa provided the bedrock for socio-economic and political development. Therefore it has been deduced that the loss of these learners through death relating to HIV/AIDS will not only affect their families but the entire country. IIEP (2008:62) further observed a gap in education related to HIV/AIDS among the youth in Higher Education Institutions. This is supported by Kashaga and Leticia (2002) who stated that poor knowledge about STIs/HIV was one of the factors contributing to high infection among young people.

In an attempt to respond to the prevailing problems created by HIV/AIDS, the Government of Lesotho (GOL) and the Development Partners in the country have engaged in a number of activities in Lesotho. Thahane (2009:19) stated that GOL was investing an additional M32

million to provide free school meals to all primary school children with the intention of giving children more strength to improve concentration and learning. One of the reasons for the focus on children was that many of them were either orphaned or neglected (child-headed families) as a result of HIV/AIDS. Senefield (2008:10) further noted the Mountain Orphans and Vulnerable Children's Empowerment (MOVE) project had been designed to respond to the orphans and vulnerable children's (OVC) basic rights, addressing multisectoral response to OVC's education, training requirements along with adequacy of OVC care, support and necessary protection. There is also the PMTCT programme that focuses on the prevention of HIV transmission from mother to child during pregnancy, labour and breast-feeding implemented by MOHSW, Family Health Division (NAC, 2008:21). Deduced from this discussion various programmes are activated to address issues around HIV/AIDS.

None of these programmes, however, has been designed or implemented to address HIV/AIDS issues in Higher Education Institutions in Lesotho, but yet WHO (2003:9) emphasised that for effective prevention of mother-to-child transmission (MTCT) of HIV infection, the emphasis would have to be on the *prevention* of HIV infection among young women who, together with their partners, are in a very fertile, vulnerable and sexually active age group. Learners in HEI are of child-bearing age and in the stage where they are to be involved with their future partners. In addition MoFDP (2004:6) indicated that by the year 2020, "Lesotho will have a dynamic National Manpower plan geared towards addressing the country's economic, social and political needs". It is also envisaged that "there shall be no new HIV/AIDS infections" by 2020 in Lesotho. Therefore Lesotho needs to focus on preventing HIV in HEI for their Vision 2020 to be realised and to align itself with the Regional and International declarations. It has also come to the researcher's attention that in several African countries including Kenya, Tanzania and South Africa, to mention a few, learners are actively involved in the fight against HIV/AIDS (Kashaga and Leticia, 2002; Khumalo, 2008; Ochanda [sa] and SU;OIH, 2009), where learners are involved in peer education and in various clubs. However, there is no evidence that has reached the researcher's attention indicating the involvement of learners in HEI in Lesotho in the fight against HIV/AIDS.

Following this discussion the researcher is of the opinion that HEI in Lesotho should also be on the forefront in the fight against HIV/AIDS.

1.2 Research problem

It has been observed that HIV/AIDS mainly affects young people globally and regionally, with the age group 15-24 being mostly affected (UNAIDS 2006:17), notably the age group of most learners in HEIs and yet minimal attention regarding HIV/AIDS interventions is paid to HEIs in Lesotho. Bearing this in mind, the researcher intends to focus on HEI in Lesotho.

1.3 Research questions

- What knowledge do learners in a specific Higher Education Institution in Lesotho have regarding HIV/AIDS prevention and care?
- What are the needs of learners in a specific Higher Education Institution in Lesotho regarding HIV/AIDS prevention and care?

1.4 Research aim

- The main aim of this research was to determine to which extent the learners have been informed and to explore the needs of learners in the specific Health Sciences HEI regarding HIV/AIDS prevention and care.

1.5 Research objectives

- To determine the knowledge of learners in a specific Higher Education Institution in Lesotho regarding HIV/AIDS prevention and care.
- To explore the needs of learners in a specific Higher Education Institution in Lesotho regarding HIV/AIDS prevention and care.

1.6 Research statement

Determination of learners' knowledge and the exploration of the learners' needs regarding HIV/AIDS prevention and care led, as intended, to the proposal of recommendations for an HIV/AIDS prevention and care programme in a specific Health Sciences HEI in Lesotho.

1.7 Brief Discussion of the Research Methodology

This study included both quantitative and qualitative designs known as a mixed method research. Mixed method research is defined as the combination of at least one quantitative and one qualitative component in a single research project or programme (Bergman, 2008:1). The mixed method focuses on collecting, analysing, and mixing both qualitative and quantitative data in a single study or series of studies (Creswell and Clark, 2007:5). The mixed method was singled out as being applicable to this research as the outcome of this study would culminate in the proposed recommendations for HIV/AIDS prevention and care programme for learners in a specific HEI based on the *knowledge* and *needs* as would be observed among the learners attending this institution.

The research was conducted in phases. In phase one the researcher made use of the quantitative design, while phase two employed the qualitative design. The data obtained for determining what knowledge the learners had about the topic under discussion, could be quantified. The needs could only be explored by means of the qualitative method. A qualitative approach is also applicable where changes in the current practice could be suggested (Couchman and Dawson 1996:40) as was the case in this particular research.

The study population consisted of all registered learners enrolled to pursue their studies in basic programmes. The total number of learners (N) in the basic programmes was 415. For phase one sampling was drawn from the population in the stratified random manner to ensure the representativeness of the sample (LoBiondo-Wood and Haber, 2006:271). This phase (quantitative) included a questionnaire to be completed by the participants as a tool for collecting data. Data were analysed using computer software, registered as SPSS. Face and content validity was ensured by using experts (Brink 2008:160). Reliability of the tool was based on the fact that the questionnaire had been used in the past to determine HIV/AIDS knowledge of South African educators and also its incorporation during a pilot study launched by the researcher for purposes of this research.

Phase two (qualitative) made use of purposive sampling and the sample consisted of learners' leaders for in-depth analysis (Rossouw 2003:113). The total number of student leaders is fifteen however only ten participated in the study. Focus group discussions were conducted in empty classrooms. Saturation point determined the number of focus group discussions

conducted (LoBiondo-Wood and Haber, 2006:273). Data analysis was done manually using thematic analysis and open-coding.

Trustworthiness of the research findings was determined through the following: credibility, transferability, dependability, confirmability and authenticity (Creswell and Clark, 2007:135; Creswell, 2009:191-192; De Vos, 2005:346; and Polit and Beck, 2008:539).

All ethical principles were observed as the study involved the use of human beings as participants (Brink 2008:30).

1.8 Research outcome

At the end of the study, the recommendations were proposed, based on the data as well as the findings and conclusions resulting from the research and related to the knowledge and learners' needs regarding HIV/AIDS prevention and care. The researcher was able to propose a programme for the learners in the specific HEI and the same will be submitted to the management of the specific HEI for scrutiny and possible implementation.

1.9 Significance of the study

This study is considered significant and worth doing because of the following:

- The health care professionals, patients and the communities at large could benefit from the findings and the implementation of the recommendations based on this research findings.
- The results of this study could influence the policies in the HEIs.
- Implementation of the recommendations made based on the findings of the could be cost-effective and improve quality of lives in HEIs.
- The findings of this study actually increase knowledge base about HIV prevention and care.

1.10 Definitions

Higher Education Institution – Higher Education is defined as an education provided by a university or a college (Wordweb, 2009). Collins (2003) concurs that higher education is education at university and college. Higher education is defined as a learning programme leading to qualifications higher than Cambridge Overseas School Certificate (COSC) or its equivalent and whose accreditation has been approved by the CHE under section 5(3) (c) of the Higher Education Act (1/2004). According to Wordweb (2009) an institution is an establishment. Allen (1990:614) further defines an institution as an organisation founded especially for charitable, religious, educational or social purposes. Therefore in this study Higher Education Institution is being used meaning an organisation that provides higher education in Lesotho and which is established under Higher Education Act No. 1 of 2004. The particular focus of this study was on a specific Health Sciences Higher Education Institution.

Prevention – To prevent is to keep from happening (Wordweb 2009). Collins (2003) agrees that prevent means to ensure that something does not happen. Allen (1990) further states that to prevent means to stop from happening or doing something, hinder or make impossible. Based on the stated definitions, prevention of HIV in this study refers to all strategies that are applied in an attempt to prevent the spread of the HIV infection.

Care – care means attending to someone or something (Wordweb 2009). Care is also defined as to look after and keep in good and safe position (Collins 2003). Allen (1990:169) concurs with the definitions stating that care means to keep safe, look after. SAfAIDS (2008:11) further describes caring for someone who is HIV positive as a three-pronged activity that includes giving love and support to the person, refusing to discriminate against people who are HIV positive based on their HIV status, and advocating for their rights in one's community. In this study caring for an HIV-infected individual or individuals means carrying out all activities that should be done if someone close to you is HIV positive. Such activities would include loving and supporting the person, being a good listener, behaving normally around the person, refraining from discrimination and advocating for the rights of affected individuals.

1.11 Layout of the chapters of the thesis

Chapter 1	Introduction and overview of the study
Chapter 2	Literature review
Chapter 3	Research methodology
Chapter 4	Presentation and discussion of the results
Chapter 5	Recommendations, limitations and conclusion

1.12 Summary of the chapter

It has been stated that HIV is considered as a global problem claiming millions of lives. In addition 50% of HIV new infections have been reported to be among people in the age group 15-24 years of age (UNAIDS, 2006:17). This is the age of most learners in HEIs and yet none of the interventions geared towards addressing HIV/AIDS issues focuses on learners in HEIs in Lesotho. Therefore this chapter introduced the proposed study, and showed the importance of the study. Information on the study population, goals, study methods and devices for measuring were also highlighted. The following chapter focuses on the literature review.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on a literature review regarding HIV/AIDS prevention and care in Higher Education Institutions. Brink (2008:67) defines literature as “all the written sources relevant to the topic of interest”. Literature can be available in the form of journals, books, reports, theses and dissertations, conference proceedings, government circulars, and computer databases (Brink, 2008:70). Du Plooy (2001:60) defines literature review as a systematic and thorough survey of publications that are relevant to the research topic. According to Cronje (2005:48) a literature review is conducted to learn about the topic thus establishing what has been done and what has not been done. Therefore in this research the literature review was conducted to determine what was already known about HIV/AIDS in HEIs and the intention also was to adjust the questionnaire (used for quantitative phase) according to information gained, should it prove necessary.

Literature used in this study included text-books, reports, theses and dissertations, relevant policies, manuals and computer databases and internet facilities.

In this chapter a variety of themes will be discussed. These will include HIV prevalence, transmission of HIV infection, knowledge related to HIV infection among learners in HEIs and finally HIV/AIDS interventions in HEIs.

2.2 HIV Prevalence

The number of people living with HIV continued to grow globally reaching an estimate of 33.4 million in 2008 (UNAIDS, 2010:7; UNAIDS & WHO, 2009:7). This included 31.3 million adults and 2.1 million children under the age of 15 years (UNAIDS & WHO, 2009:7). This increase has been attributed to two factors being high rates of new infections and the beneficial impact of antiretroviral treatment (UNAIDS, 2010:7; UNAIDS & WHO, 2009:7).

In 2007 there were 2.7 million new HIV infections and two million deaths related to HIV globally (UNAIDS, 2008:32). In 2008 there had been no change in the overall number of new HIV infections and AIDS-related deaths compared to 2007 (UNAIDS, 2010:7).

The Sub-Saharan region is the region most heavily affected by HIV infection globally (WHO-SEARO, 2008:1). UNAIDS (2010:7) further indicates that in 2008, 71% of all new infections were in the Sub-Saharan region. The HIV infection has affected the region in different ways, for example Namibia, South Africa, Zambia and Zimbabwe have adult HIV prevalence of around 15-20% (AVERT, 2010). In three Southern African countries, the national adult HIV prevalence rate now exceeds 20%. These countries are Swaziland (26.1%), Botswana (23.9%) and Lesotho (23.2%) (AVERT, 2010).

According to HEAIDS (2010:2) HIV prevalence studies among university populations have not been done globally or in South Africa other than on small scale and therefore have not been published. On the other hand UNAIDS (2006:17) indicated that 50% of all new cases of HIV infection worldwide were among people aged 15-24 years, the age group of most learners in HEIs. That gives an impression that HEIs are greatly affected. Ochanda [sa] concurs with the previous author stating that HEIs are more affected by HIV than the rest of the populations.

Contrary to these statements the study performed in South African HEIs determined an overall HIV prevalence that is much lower than that of the general adult population. In the same study HIV prevalence of academic staff was found to be 1.5%, followed by learners at 3.4%, administrative staff at 4.4% and finally service staff at 12.2% (HEAIDS, 2010:105). Generally all these figures are lower than those of the national adult population aged 15 years and above that is at 16.5% (HEAIDS, 2010:1).

The knowledge of HIV/AIDS prevalence globally, regionally and even in Lesotho illuminates the seriousness of the need for the responses geared towards addressing HIV/AIDS issues among the learners in HEIs. It also helps us to see the effects of the interventions that have been made to address HIV/AIDS in other countries. For example in South Africa where interventions started as far back as 1993 in HEIs (Williamson, 2002:55-57), the prevalence of HIV among populations in HEIs is far lower than in the general population. This will also

help in the proposal of recommendations for HIV/AIDS prevention and care programmes in the HEI sector in Lesotho.

2.3 Transmission of HIV infection

The pandemic disproportionately affects injecting drug users (IDUs), men who have sex with other men (msm) and sex workers outside the Sub-Saharan Region. However in the Sub-Saharan region the HIV infection among heterosexual couples has escalated (WHO-SEARO, 2008:1). UNAIDS (2008:43) concurs and adds that heterosexual intercourse remains the main driving force behind HIV infection rates in the Sub-Saharan region. A study performed in HEIs in Uganda revealed that learners at this educational level began to have freedom from parental guidance and therefore started to be involved in sexual activities (IIEP, 2008:62). The researcher is therefore of the opinion that most of the activities geared towards addressing HIV issues among the learners in HEIs should focus mainly on the prevention of sexual transmission of HIV as is discussed below.

2.3.1 Sexual transmission of HIV

According to MoET (2005:17) sexual transmission is the most common mode of transmission of HIV. BCM (2007:4) concurs with MoET that sexual intercourse is the major route of HIV transmission in the world. Jackson (2002:83) adds that sexual intercourse between men and women is responsible for over 70% of HIV infection worldwide. UNAIDS (2008:43) supports the above authors indicating that heterosexual intercourse is the epidemic's driving force in sub-Saharan region. UNAIDS (2008:43) further indicates that unprotected anal sex between men is probably a more important factor in Sub-Saharan Africa than it is commonly thought with the prevalence ranging from 22% - 43% in Senegal and Kenya based on several studies conducted. Jackson (2002:84) further states the most risky time for transmission of HIV is during window period, that is shortly after new infection and before antibodies have developed. The same author states that there is also a difference in the strains and some are more readily transmitted heterosexually than others like HIV-1C and therefore is more prevalent in Southern Africa.

The discussion on the transmission of HIV infection guides the researcher on the most prevalent mode of transmission among the youth and can therefore be used in conjunction with the collected data in order to venture recommendations on the HIV/AIDS prevention and care programme for learners in the specific HEI in Lesotho.

2.4 Knowledge related to HIV infection among learners in HEIs

Findings of a study conducted in Uganda revealed that colleges did not provide adequate knowledge about HIV/AIDS prevention to learners (IIEP, 2008:46), learners felt that the amount of information imparted was not sufficient. It was generally felt that first-year learners needed extensive orientation to college life in relation to HIV/AIDS risks that they would be exposed to in the college environment (IIEP, 2008:47). NAC (2007b:19) concurs in that low levels of knowledge among the population especially among the vulnerable groups with regard to the way HIV infection is acquired and spread can be considered as one of the drivers of the HIV pandemic. This is supported by Kashaga and Leticia (2002) who state that poor knowledge about STIs/HIV as one of the factors contributing to high infection among young people. WGHE (2006:101) adds that not only learners lack knowledge about HIV/AIDS but even their tutors/teachers lack knowledge and skills to impart to learners how to effectively deal with HIV/AIDS issues. UNFPA ([sa]) indicates that despite the fact that the young people have grown up in a world changed by AIDS, many still lack comprehensive and correct knowledge about how to prevent HIV infection. NAC et al. (2008:34) state that in Lesotho 18.4% of young males (aged 15-24 years) and 25.8% of females in the same age group have a comprehensive knowledge about AIDS. These percentages are low considering the fact that people in this age group are likely to be involved in sexual activities. Such involvement is considered as the greatest driving force behind HIV/AIDS rates in the Sub-Saharan region.

The literature search with reference to knowledge were reviewed in different perspectives. Some authors, nevertheless, consider low levels of knowledge to be prevalent among the populations. In other cases such as NAC (2008:35) it has been indicated that even in cases where there is comprehensive knowledge the prevalence of HIV infection still measures high. NAC (2006:2) concurs with NAC (2008) in that knowledge levels are high in Lesotho due to the ongoing public education and exemplary commitment of National leadership to HIV

awareness. NAC (2008:35) further states that there are still some misconceptions about the disease that still leaves behavioural change as a challenge in an attempt to reduce HIV transmission. Machobane and associates (2008:1) conducted general training needs assessment in Lesotho and found that the majority of respondents had basic knowledge on what HIV/AIDS is and on how it is transmitted. HEAIDS (2010:3) concurs with the previous authors regarding knowledge, stating that knowledge of HIV/AIDS transmission among learners is adequate except for the vertical transmission and the availability of post-exposure prophylaxis in the case of rape (HEAIDS, 2010:39). HEAIDS (2010:3) further indicates that learners are bored with the AIDS education.

The discussion on knowledge among HEIs' learners and the youth generally helped the researcher to assess the current knowledge and it could also guide in answering the first research question in this study about the knowledge of learners regarding HIV/AIDS prevention and care.

2.5 HIV/AIDS interventions in HEIs

The Policy Framework on HIV and AIDS for Higher Education Institution in South Africa, adopted at an event in Johannesburg, recognised that institutions had to act to prevent new HIV infections and provide access to treatment, care and support for staff and learners infected or affected by the pandemic (Khumalo, 2008).

Among the HEIs in Lesotho, National University of Lesotho is the only institution that has an HIV/AIDS policy which was launched towards the end of 2009 (NAC, 2009:8). On the other hand a number of universities in Africa, mostly in Namibia, Nigeria, South Africa, Tanzania and Uganda have already had institutional policies in place for some time (WGHE, 2006:7). In addition Williamson (2002:55-57) stated that the evolution of HIV/AIDS policies in South African universities had been haphazard with a few that started as far back as 1993 (University of Cape Town) and others that started afterwards. The researcher is therefore of the view that HEIs in Lesotho should also develop their institutional HIV/AIDS policies/programmes that will help to address the following: prevention as the key strategy in the fight against HIV/AIDS, protection of human rights, and support and care for the affected and infected individuals at institutional level.

Many universities had introduced orientation courses for first-year learners by October 2005 in Kenya (Ochanda, [sa]). Other universities have programmes which include talks on the pandemic and information on how learners can protect themselves from the virus. Kenyatta University also offered learners a compulsory core unit on HIV/AIDS and drug abuse (Ochanda, [sa]). One of the recommendations made by WGHE (2006:29) in its study conducted in African HEI was that a core unit on HIV/AIDS should be integrated in the curriculum of all HEIs with specific guidelines to address critical components of the pandemic. A core unit of HIV/AIDS has already been integrated into curriculum in countries like Botswana, Namibia, South Africa and many other countries in Africa (United Nations Lesotho, 2009:34-35).

In some of these universities, keen awareness of the pandemic has led learners to create Anti-AIDS associations to raise awareness further among the student population (Ochanda, [sa]). The University of Nairobi, for example, has a very strong student association known as Medical Learners Against AIDS, which does not limit its activities to the campus alone; it has been invited by UNESCO to conduct peer education activities in secondary schools in some of the Kenyan provinces (Ochanda, [sa]). Kenyatta University has also formed a Learners Aids Control Organization to discourage risky sexual behaviour. (Ochanda, [sa]).

Some University Learners Associations have set up an annual HIV testing day on campuses (Ochanda et al., [sa]). Kashaga and Leticia (2002) stated that in Tanzania over a third of AIDS cases are among 15-35 year olds and indicate that young people should be used as facilitators or as a solution to the current HIV prevalence. In support, Ochanda et al. ([sa]) state that involvement of learners in peer education is the step in the right direction as peers can educate and convince other learners better than adults especially because young people in this age group 15-24 are prone to rebelling against almost everything advocated by older generations. Peer student programmes equip learners with more information as well as with skills to act on the information to make informed decisions (Williamson, 2002:55). A number of HEIs in South Africa and many African countries have peer student programmes where learners are taught skills to be imparted to others and the results have been encouraging (Ochanda et al. [sa]; Kashaga & Leticia, 2002).

The review on interventions carried out in HEIs supplied the researcher with information about the current situation in the country and also about what is being done in other countries that can be recommended for implementation in Lesotho.

2.6 Summary of the chapter

Based on the above discussion on data obtained from the literature review the researcher is of the opinion that there is nothing much that is being done concerning HIV/AIDS in HEIs in Lesotho, or otherwise, that whatever is being done has not been documented, therefore the researcher is focusing the attention on HIV/AIDS prevention and care for learners in an HEI in Lesotho. This could be achieved by conducting a mixed method study to determine the learners' knowledge and to explore the needs of the learners regarding HIV/AIDS prevention and care. Learners' knowledge was determined by the quantitative phase of the study. In this phase data were collected by using the questionnaire that has been used previously to determine knowledge on HIV/AIDS among South African educators. The questionnaire was adjusted to include research-specific biographic data and another three questions, selected from the literature and those were considered relevant to learners especially in a Health Sciences HEI, were added.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter will focus on the research methodology to explain population, sample and sampling methods and the procedures for collecting and analysing data. It also covers ethical considerations, reliability and validity, and trustworthiness of the research findings.

The purpose of this chapter is to explain the research design and the methodology for determining learners' knowledge and exploring their needs regarding HIV/AIDS prevention and care for learners in an HEI in Lesotho.

This study was conducted in four stages. Stage one was when the researcher identified the research problem and questions as well as the purpose of the study. Relevant literature was reviewed. Stage one also included reference to the selection of the research method and design, and sampling process. During the second stage of this study, a pilot study was conducted. This was the stage during which data were collected. The third stage of the study encompassed the interpretative stage where data were analysed and the results interpreted. The fourth stage was the communication stage for communicating the research findings in the form of the written report for use by other researchers and all the stakeholders.

3.2 Research Design

This study included both qualitative and quantitative designs known as a mixed method research. Mixed method research is defined as the combination of at least one qualitative and one quantitative component in a single research project or programme (Bergman, 2008:1). The mixed method focuses on collecting, analysing, and mixing both qualitative and quantitative data in a single study or series of studies (Creswell and Clark, 2007:5). A mixed method was considered to be applicable to this research as knowledge that would be

quantified would be determined. In addition the outcome of this study, as had been planned, would be to propose recommendations for HIV/AIDS prevention and care programme to be based on results and findings about existing knowledge and needs and applicable to learners in a specific HEI. The needs were explored by means of a qualitative method. A qualitative approach is also applicable where changes in the current practice could be suggested (Couchman and Dawson, 1996:40) as is the case in this particular research. The data were collected in phases as discussed below.

3.2.1 Data collection Phase 1- Quantitative design

The quantitative aspect of the study was employed for determining the knowledge of the learners regarding HIV/AIDS prevention and care. With quantitative research the focus is on developing reliable and valid tools that are assumed to produce reliable results and that may not be so where measurements of attitude and behaviour are involved (Parahoo, 2005: 80). Therefore learners' knowledge was determined so that the information could assist HIV/AIDS prevention and care programme.

3.2.1.1 Population

Population is defined as the entire aggregation of cases that meet a designated set of criteria (Polit, Beck & Hungler, 2001:233). In addition Parahoo (2006:256) defines population as the total number of units from which data can potentially be collected. The population in this study consisted of all the people who were registered as learners in a specific Higher Education Institution in Lesotho, who were pursuing their studies in basic programmes. They were enrolled in the programmes that admit people from high schools and were in the age group 15-40 years of age. The total population of learners in this Institution amounted to 415 learners in different health-care cadres like nursing, pharmacy technology, medical laboratory technology, and environmental health sciences. The female:male ratio of the learners in this institution is about 70:30.

3.2.1.2 Sample

As a rule, when studies are conducted, a complete coverage of the total population is seldom possible and all members of the population of interest cannot possibly be reached or included. The population may be too large to study or the researcher may not have sufficient resources and time to attempt or undertake such a task (Strydom, 2005:194). In such cases only a portion of the population may be selected to be studied and that is referred to as a sample. In this study a sample of 103 (25%) learners were selected and the sampling method is discussed below.

3.2.1.3 Sampling

Sampling is defined as a process of selecting a portion or subset of the designated population to represent the entire population (LoBiondo-Wood & Haber, 2006:263). Burns and Grove (1997:41) concur stating that sampling is a process of selecting subjects who are representative of the population being studied. There are several divisions of sampling and in this study stratified random sampling was chosen as an appropriate way of selecting a representative group from the population under study. In stratified random sampling the population is divided into homogeneous subsets (Polit, Beck & Hungler, 2001:241). Stratified random sampling assists in achieving a greater degree of representativeness (LoBiondo-Wood and Haber, 2006:271). The population in the Institution is made up of learners that are pursuing different levels of study according to a variety of programmes. These factors were believed to have direct implications for the level of knowledge on certain topics. During teachings or lectures and practical work one programme may emphasise certain aspects of the subject of interest, namely HIV/AIDS, more than another programme. In some cases the learners, especially those who were at the beginning of their studies, may not have been exposed to certain aspects of the study whereas learners in advanced levels may have been introduced to such aspects. The sample was stratified as follows: The total population comprised 44% Nurses, 13% Pharmacy Technologists, 12% Medical Laboratory Technologists, 12% Environmental Health Scientists and 19% Nursing Assistants. The sample was therefore composed of similar percentages of learners in order to observe the degree of fit between the sample and population (Parahoo, 2006:277). The guidelines for determining the size of a sample for quantitative research were applied in this study as follows: for a population of 200 people the suggested percentage is 32% and for 500 people it

is 20% (Strydom, 2005:196). Since the total population of learners in the specified Institution is 415, a number between 200 and 500, though closer to 500, the sample size was set at 103 participants, *i.e.* 25% of the population. The sample included 46 Nurses, 13 Pharmacy Technologists, 12 Medical Laboratory Technologists, 12 Environmental Health Scientists and 20 Nursing Assistants. The sample was also stratified according to the levels of study. This was done because one would expect that in different levels of study even the level of knowledge, experience and challenges might be different. With regard to the different programmes there was a possibility that some aspects of the same topics would have been dealt with differently depending on speciality. The table below shows the stratification for different programmes according to levels of study.

Table 3.1

	Nursing	MLS	PTP	EHP	NA
Year 1	25% (*11)	24% (*3)	33% (*4)	51%(*6)	49% (*10)
Year 2	37% (*17)	29% (*3)	40% (*5)	49%(*6)	51%(*10)
Year 3	38% (*18)	47% (*6)	27% (*4)		

Key: MLS – Medical Laboratory Technologists

PTP – Pharmacy Technology

EHP – Environmental Health Scientists

NA – Nursing Assistants

* - number of participants per programme in each year of study.

Table 3.1 above shows the percentages of learners in different programmes according to year of study.

3.2.1.4 Recruitment of participants

The prospective participants were approached and requested to assemble on the institution grounds or clinical area during their free periods when they were not busy. The information in the leaflet of the consent forms were provided to them and they were allowed to ask questions relating to the study. All the questions were answered. Then they were requested to

participate. The fact that participation was voluntary was emphasised so that they would not participate because the researcher had also been their lecturer.

3.2.1.5 Data collection

A questionnaire (Appendix 3 and 4) containing close-ended questions was distributed for completion by the learners in the specific Institution for addressing the quantitative aspect of the study by means of which to determine the learners' knowledge on the prevention and care of HIV/AIDS. The questionnaire was a slightly adjusted copy of the questionnaire used in the study conducted by the Education Labour Relations Council: The Health of our Educators – A focus on HIV/AIDS in South African Public Schools 2004/5 survey. However, the questionnaire was adjusted, merely by including additional biographical questions as well as three other questions considered relevant for the learners attending a Health Sciences HEI in Lesotho.

3.2.1.6 Data analysis

Data analysis involved the use of computer software in the form of statistical packages for the social sciences (SPSS). Such packages or programmes allow for users of personal computers to develop inferential tables. These packaged computer programmes perform data analysis and provide results in a print-out (Burns & Grove 1997:412).

3.2.1.7 Pilot study

Pilot study is defined as a small-scale study done in preparation of a major study (Polit, Beck & Hungler 2001:467). Conducting a pilot study would provide the researcher with the information that may be required to improve the research and to assess its feasibility (Polit, Beck & Hungler 2001:47). Therefore a pilot study consisting of 12 (11.5% of sample) participants was carried out for the purposes of this study. These participants were provided with the questionnaire meant for this study and were requested to complete the questionnaire. This step was included in order to monitor whether questions would indeed carry the same meaning with different people, and whether the formulation of each question was such that it would make it easy for participants to attach the correct meaning to it or perhaps easy to misinterpret it. According to the responses it was also possible to determine whether a question would render the type of response or information that would correspond with what was needed for the specific research objectives. The pilot study furthermore served the

purpose of assisting the researcher in decisions with regard to possible modifications or adjustments that would have to be made to the original questionnaire in order to be more suitable for the research at hand.

3.2.1.8 Reliability

Reliability is defined as the consistency and dependability of a research instrument to measure a variable (Brink, 2008:207). The questionnaire that was selected for this study had been used previously for research on aspects related to prevention and care in an HIV/AIDS context. Apart from a few adjustments as had been described before (3.2.1.5 above) and that would, *inter alia*, also include focus on the hazard of occupational exposure as would be the case with health care workers like the learners of this HEI, the questionnaire was deemed suitable. In the original study the questionnaire was used to determine knowledge of educators in public schools in South Africa pertaining to HIV/ AIDS. A pilot study was conducted prior to the main study to strengthen the reliability of the questionnaire.

3.2.1.9 Validity

Validity of a research project or study depends on the degree or extent to which the instruments used for measuring are successful at measuring accurately what they are supposed to measure (LoBiondo-Wood & Haber 2006:338). A valid instrument measures what it is supposed to measure, for example, an instrument that has to measure knowledge should not measure attitude. McBurney (2001:128) adds that construct validity is the test that actually measures what it should measure and not anything else. This means that the test for construct validity is that only the construct should be measured and not other or unrelated constructs as well (McBurney 2001:128). The validity of the questionnaire was evaluated by means of the results of the pilot study. A number of experts on HIV/AIDS were also consulted to ensure that the questionnaire would measure knowledge only and nothing else.

Content validity

Content validity is an “assessment of how well the instrument represents all the components of the variable to be measured” (Brink, 2008:160). In support McBurney (2001:128) defines content validity as a notion that a test should sample a range of behaviour that is represented by the theoretical concept being measured. With the background insight gained from the literature review it was possible for the researcher to evaluate the questionnaire’s content

validity and to judge whether the design of the questionnaire would make provision for inclusion of all the components of learners' knowledge regarding HIV/AIDS prevention and care. It was for this reason, too, that the questionnaire was presented to the experts in the field of HIV/AIDS issues so that the input suggested by them could be incorporated.

Face validity

Face validity is used to determine the clarity and readability of content (Brink 2008:160). According to McBurney (2001:128) face validity is considered as the weakest form of validity. It ensures that the instrument appears to measure what it is supposed to measure at the face value (McBurney, 2001:128). To ensure face validity of the questionnaire the researcher once again relied on the opinion of the mentioned experts.

3.2.1.10 Data-collection devices

The questionnaire served as the device for collecting data on knowledge pertaining to the aspects of HIV/AIDS under study.

3.2.2 Data Collection Phase 2- Qualitative design

Qualitative design is more applicable for exploring areas where information is limited and /or to describe behaviour, themes, trends, attitudes, needs or relations (Du Plooy, 2001:83). Brink (2008:112) indicates that some variables like exploring, describing or promoting human experiences may be difficult to quantify hence in such cases qualitative studies are employed.

Brink (2008:112) further illustrates that qualitative methods focus on meaning; experience and understanding from the participants' point of view. In the case of this study some variables like the learners' knowledge could be measured, but their perceptions, attitude, behaviour and needs could not be measured in the same way, yet it was decided that information with regard to all these facets would be important and would certainly contribute greatly to the perspectives and findings of this study. Qualitative research was found to be applicable to this study as the outcome of this study would be to propose recommendations for an HIV/AIDS prevention and care programme for learners, *i.e.* a programme that was likely to lead to changes in the current practice and such changes would certainly not exclude behavioural patterns, attitude and the like. Couchman and Dawson (1996:40) support the

previous statement by indicating that qualitative research is applicable where changes in the current practice are anticipated instead of performing a study merely to increase knowledge.

3.2.2.1 Population

Population is defined as the entire aggregation of cases that would meet a designated set of criteria (Polit, Beck & Hungler, 2001:233). In addition Parahoo (2006:256) defines population as the total number of units from which data can potentially be collected. The population in this study consisted of all the people who were registered as learners in a specific Higher Education Institution in Lesotho and who were pursuing their studies according to a variety of basic programmes. Their ages ranged between 15 and 40 years. The total population of learners in this Institution included 415 learners in different health-care cadres such as nursing, pharmacy technology, medical laboratory technology, and environmental health sciences

3.2.2.2 Sample and sampling

According to Polit, Beck and Hungler (2001:246) “qualitative studies almost always use small, non-random samples”. Parahoo (2006:277) states that qualitative studies generally use small samples but adds that size is not the starting point. According to Parahoo (2006:277) the purpose behind the selection of a sample is more important than the eventual size of the sample. In this research non-probability sampling was used. This sampling was arbitrary and therefore the findings cannot be generalised to the population (Rossouw, 2003:112). The purposive sample was selected as the technique was applicable to the deep analysis that was required (Rossouw, 2003:113). The participants used for this phase were selected from among the leaders of the learners. Democratically elected leaders, namely the Student Representative Council (SRC) and leaders of religious associations/ movements and any other associations found in the Institution were targeted as possible participants in the qualitative phase of the study. The reason for selecting the leaders of the learners was that these were the people who would be expected to have most of the information regarding the general needs of the learners pertaining to the institution’s administration. They even represented the learners in various fora at the institution and therefore were believed to be in a position to provide deeper information concerning the needs of the learners. There were 15

learners' leaders that were functional composed of the SRC and class representatives, other targeted leaders were reported not to be functional and could not be identified. Generalisation of the findings in this phase would be limited, and understandably so, in the sense that not all of the findings might apply to each and every individual enrolled at the institution. The findings would, however, be valuable and altogether necessary in support of an in-depth analysis concerning HIV/AIDS issues and needs of the learners in the specific HEI in Lesotho.

3.2.2.3 Data collection

Data were collected by using focus group discussions. Focus group discussions are said to be a means of better understanding how people feel or think about an issue, product or service and participants were selected because they had certain characteristics in common (Greeff, 2005:299). In the case of this research the learners' leaders were selected. In addition Polit, Beck and Hungler (2001:265) describe focus group interviews as interviews with groups of 5 to 15 individuals whose opinions and experiences are solicited simultaneously. Focus group discussions were conducted in classrooms that were not otherwise occupied at that stage. Two of the prerequisites that were taken into account for suitable venues were that the participants should feel private enough to talk and that a minimum of noise or disturbance should be experienced in order to allow for successful recording of the discussions. The focus groups consisted of five learners per discussion group and were taken from among the already selected participants as described above in 3.2.2.2. The total number of focus group discussions was determined by identifying the point at which saturation of information had been reached (LoBionbo-Wood & Haber, 2006:278). There were two focus group discussions conducted.

The main question by means of which to introduce the focus group discussions was: "What are your needs for HIV/AIDS prevention and care?" Efforts were made to create a tolerant environment that would encourage participants to share perceptions, view points, experiences, wishes and concerns without pressurising participants to vote or reach any consensus (Greeff, 2005:299). The fact that focus group discussions tend to generate much dialogue granted the learners/ participants an opportunity to discuss uncertainties or difficult issues surrounding HIV and AIDS in an open and transparent manner. The participants, in fact, appreciated the opportunity of such open and transparent discussions on issues related to

HIV and AIDS while at the same time it was revealed that doing so was exactly one of their needs. They appeared to regard such discussions as a very necessary step in the process of effective prevention and care.

The focus-group discussions had the advantage that the participants and researchers were less likely to be misinterpreted as clarifications and explanations could be offered in a face-to-face setting, unlike the state of affairs in the event of questionnaires being used (Burns & Grove 1997:353).

3.2.2.4 Trustworthiness

Validity in qualitative studies is based on determining whether the findings are accurate (Creswell 2009:191). There are five criteria for developing trustworthiness of the qualitative research (Polit & Beck, 2008:539).

- **Credibility:** The use of rich and thick description will transport the readers to the setting and give the discussion an element of shared experiences (Creswell, 2009:191). Creswell (2009:191), De Vos (2005:346) and Polit & Beck (2008:539) explain that for the research findings to be credible detailed description of the setting, all the components of the population and all the steps taken should be provided. The researcher provided a detailed description of the setting and all components of the population in this phase of the study. The steps taken were also discussed.
- **Transferability:** This refers to the possibility of the study to be generalised and the extent to which the findings can be transferred to other settings (De Vos 2005:346, Polit & Beck 2008:539). According to De Vos (2005:346), and Polit and Beck (2008:539) clear details of data collection and analysis should be provided so that the readers can evaluate the applicability of the study to other settings. The researcher provided clear details of data collection and analysis.
- **Dependability:** Dependability refers to the stability of data over time and conditions (Polit & Beck, 2008:540) assuming that the conditions remain unchanged (De Vos,

2005:346). Creswell (2009:192) states that an external coder should be used to co-analyse the data to ensure the dependability of the research findings. As a result an external coder was used to co-analyse the data in this study. The external coder was someone who was familiar with HIV/AIDS prevention and care and qualitative research methodology.

- **Confirmability:** This criterion refers to the objectivity, accuracy, relevance and meaning of data as information provided by the participants (Polit & Beck, 2008:539). Creswell and Clark (2007:135) explain that for confirmability to be ensured the final report should be sent to the participants to determine whether the findings reflect what they had offered as information. This step is taken to avoid subjectivity that may include biased interpretations, motivations and perspectives on the part of the researcher (Polit & Beck, 2008:539). The researcher made this part of the final report available to the participants for them to determine whether the findings reflected what they had intended to convey as information with regard to their experiences and needs.
- **Authenticity:** Authenticity “refers to the extent to which the researchers fairly and faithfully show a range of different realities” (Polit & Beck 2008:540). To ensure authenticity of the study negative information that runs counter to the themes and the tone of the participants should be presented (Creswell, 2009:192, Polit & Beck, 2008:540). In this study all information that ran counter to the themes were presented in as realistic a way as possible.

3.2.2.5 Data-collection devices

Informed consent was obtained from the participants. It was agreed that the audio-tape and note-taking could be used during the focus group discussions for reporting the information that was offered as the reported information would provide the researcher with an opportunity to review the detail at a later stage.

3.2.2.6 Data-analysis

All the focus group discussions were tape-recorded and were verbatim transcribed.

- The first step in qualitative data analysis was to organise, arrange and prepare data systematically. This step requires that data be typed and classified into themes and categories (Creswell, 2009:186).
- Once this step had been completed the researcher could read and re-read the data in order to gain a thorough overview of the information at hand. During the reading and re-reading the researcher inserted notes and made use of colour codes by highlighting selected and corresponding aspects in specific colours.
- The process of coding then followed. Coding is defined as the process of organising data into chunks or segments (Creswell, 2009:186). Similarities, differences and unique findings were identified and categorised in order to develop themes and categories.
- Data were segmented, arranged and ‘labelled’ with a term based on the actual language of the participant. Data were clustered in groups concerning similar topics and brought together to single out major topics or more frequent topics as well as subtopics or less frequent or important topics. In this way unique or ‘outlier’ topics could also be detected.
- The steps taken thus far were valuable in the sense that arrangement of material belonging together could be completed and reviewed to determine whether the collected data would correlate with the research questions to be answered. In many studies such categories are referred to as codes.

- From the results the relevant findings, conclusions and recommendations could be formulated.
- Data were analysed for material that would address the following:
 - Codes on topics that could be expected and were based on literature and common sense.
 - Codes that were surprising and had not been anticipated at the beginning of the study.
 - Codes that addressed a larger theoretical perspective.

3.3 Ethical implications

The proposal for the study was approved by the Stellenbosch University Health Sciences Research Ethical Committee (HREC) and the Research Committee of the Ministry of Health and Social Welfare in Lesotho. Since the study made use of people as participants there were some ethical implications that had to be considered to ensure that human rights of the participants would be protected. The implementation of such considerations is supported by Polit and Hungler (1997:127) which state that when humans are used as study participants in a research great care must be exercised in ensuring that the rights of those humans are protected. Brink (2008:30) concurs by pointing out that when the research involves human subjects the researcher has special concerns of protecting the rights of the human subjects. Human rights are claims and demands that have been justified in the eyes of the individual or by consensus of a group of individuals (Burns & Grove, 1997:200).

Parahoo (2006:111) indicates that there are six ethical principles that health professionals need to consider to protect their clients from harm. These principles are (1) beneficence, (2) non-maleficence, (3) fidelity, (4) justice, (5) veracity and (6) confidentiality. Brink (2008:31) on the other hand states that there are three fundamental ethical principles that guide researchers and these are (1) respect for persons, (2) beneficence and (3) justice. For the purposes of this study, all ethical principles will be respected, especially, the principle of respect for persons. This principle indicates that individuals are autonomous which means they have a right to self-determination (Brink, 2008:32). Burns and Grove (1997:200) further state that humans are capable of controlling their own destiny.

This study was focused on learners attending a Higher Education Institution. These are people who were expected to be of adequate legal and cognitive competency to decide

whether they preferred to participate in the study or not. The autonomy would also allow the participants to refuse to give information on the matters they did not want to discuss, to withdraw from the study at any time and to ask for any clarification that might be required. The researcher avoided using any form of coercion (Brink, 2008:32). Coercion was avoided in all forms, e.g. learners were informed that refraining from participating in the study would not have any impact on their academic progress and neither were any rewards offered to those who did volunteer to participate as the latter could also be a coercive factor with regard to learners from poor backgrounds. The prospective participants were given full information regarding the study without any deception. In addition Polit and Hungler (1997:134) explain that prospective participants who are fully informed about the nature, the demands, potential costs and benefits of the study are in a position to decide about participation in the study, that is they can make an informed decision and give informed consent. Two envelopes labelled consent forms and questionnaire were used to collect consent forms and questionnaires from the participants to ensure anonymity of the participants.

3.4 Chapter Summary

This chapter gives information on all the steps and processes carried out during the study, starting with the research design and continuing up to the ethical considerations. The next chapter will deal with the presentation and discussion of the results.

CHAPTER 4

PRESENTATION AND DISCUSSION OF THE RESULTS

4.1 Introduction

In the previous chapter the research methodology, including the data collection and data analysis, was discussed. In this chapter the results of the phases described in the previous chapter will be discussed.

This study had two objectives namely:

- To determine the knowledge of learners in a specific HEI in Lesotho regarding HIV/AIDS prevention and care.
- To explore the needs of the learners in a specific HEI in Lesotho regarding HIV/AIDS prevention and care.

The first objective has been achieved through the quantitative method by using a questionnaire. This was phase 1 of the study. The pilot study done with 12 participants mainly from the first year of study, was conducted and the results showed that the questions had been understood by the learners and therefore no modifications proved to be necessary. The second objective was addressed according to a qualitative method by means of focus group discussions. The data obtained were arranged and categorised in order to perform the necessary analyses, as indicated in the previous chapter.

4.2 Research findings

4.2.1 Results of phase 1 of the study will follow below

4.2.1.1 Brief description of population and sampling.

The total number of learners in this HEI in the basic programmes is 415. Learners or learners are enrolled to study different health cadres, namely General Nursing, Medical Laboratory Sciences, Pharmacy Technology, Environmental Health Sciences and Nursing Assistants.

The sampling method followed was stratified random sampling as had been explained earlier on in the methodology chapter. In this method the proportions of learners from each programme were considered and hence the sample was composed of similar proportions of participants to the population. The population distribution of the learners in this HEI is shown in figure 1 below. The proportions of the participants per programme and year of study were as in table 4.1. These proportions of the participants were based on the number of learners in each programme and in each the year of study. That means the sample was proportional to the population. The environmental health and the nursing assistants were offered as two-year certificate programmes as against others that were offered as three-year diploma programmes. A total of 120 questionnaires were distributed to learners in different programmes and years of study and 109 questionnaires were returned. The response rate was therefore calculated as being 90.8%. This was considered a successful response as the study required 103 participants from different programmes and years of study as explained in 3.2.1.3.

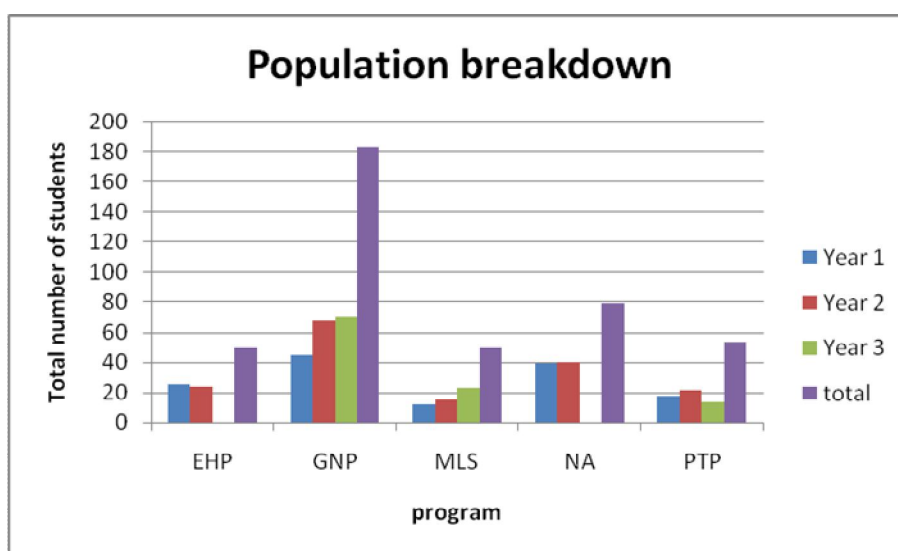


Figure 1 shows the total number of learners in different programmes

Key: EHP- Environmental Health Sciences

GNP- General Nursing Programme

MLS- Medical Laboratory Sciences

NA- Nursing Assistant

PTP- Pharmacy Technology Programme

Table 4.1 The number of participants according to programme and year of study.

	GNP	MLS	PTP	EHP	NA
Year 1	12	3	4	7	10
Year 2	18	3	5	7	11
Year 3	19	6	4		

The questionnaire used in this study consisted of two parts so as to obtain biographical data as well as specific knowledge-related data. The knowledge for participants in general will be presented and then for the questions where less than 90% of the participants answered correctly such questions will be further analysed based on the programmes and years of study to see whether there is any relationship in the knowledge levels of the learners. The questions in this questionnaire were intended to determine the knowledge of the learners regarding HIV/AIDS prevention that they can apply for their own good to prevent HIV infections directed to them. It did not contain any questions that may be covered in their respective courses.

4.2.1.2 Research Findings and Discussion of the results of Phase 1

Data analysis began by entering raw data into the SPSS 16.0 version for windows data sheet. All the variables (questions) were numbered X1 to X31. X1 represented the participant's number. X2 to X31 were the questions as in the questionnaire. The participants were also assigned numbers from 1 to 109. Each question in the biographical data was scored from 1 to 5 where there were five options or from 1 to 2 or 3 depending on the number of options. The questions on the knowledge section were all scored from 1 to 3. 1 represented "true", 2 represented "don't know" and 3 represented "false". Data for each participant were entered according to the assigned number and completed before entering data for the next participant. The captured data were then submitted to the statistician for processing and development of the tables. The researcher then used tables to develop charts. The missing data ranged from

1.09-3.27% where some questions had not been answered. In such cases only available data were considered for analysis.

The HIV/AIDS knowledge levels were found to be high among the participants with only about six questions that were answered correctly by less than 90% of the learners, and four questions were answered correctly by 100% of the learners. The remaining sixteen questions were answered correctly by between 90-99.1% of the participants. In cases where questions were answered correctly by less than 90% of the participants, such questions were analysed according to programmes and to year of study to find out if they had influence on the way questions were answered.

For variables 5, 11, 13 and 22, “there are people who are HIV-positive in Lesotho”, “having sex with more than one partner increases a person’s chance of being infected with HIV/AIDS”, “people can protect themselves from HIV by using a condom correctly every time they have sex”, and “a person who is HIV-positive needs to be loved and supported”.

These variables were answered “true” and correctly by 100% of the participants.

This means that the participants are aware of the existence of HIV infection in Lesotho. They are also aware that one can increase the chances of being infected if one has more than one sex partner. They are aware that condoms can protect one from HIV infection. They all know that HIV-positive individuals need to be loved and supported. For this four questions knowledge of participants is considered to be satisfactory.

Variable 6 “There are people who are HIV-infected in your Institution”

57% of the participants answered “true”, while 43% of the participants gave the answer “don’t know”. This will therefore be analysed based on programmes and year of study.

The programmes responded to this variable as follows: General Nursing, 28% answered “true”, and 15.9% “don’t know”, 7.5% and 5.6% of Environmental Health assistant answered “true” and “don’t know” respectively. 6.5% and 4.7% of participants who answered “true” and “don’t know” respectively were from Medical laboratory sciences. Nursing assistant

participants answered 8.4% and 11.2% true and don't know respectively. Participants from Pharmacy technology answered 6.5% and 5.6% "true" and "don't know" respectively.

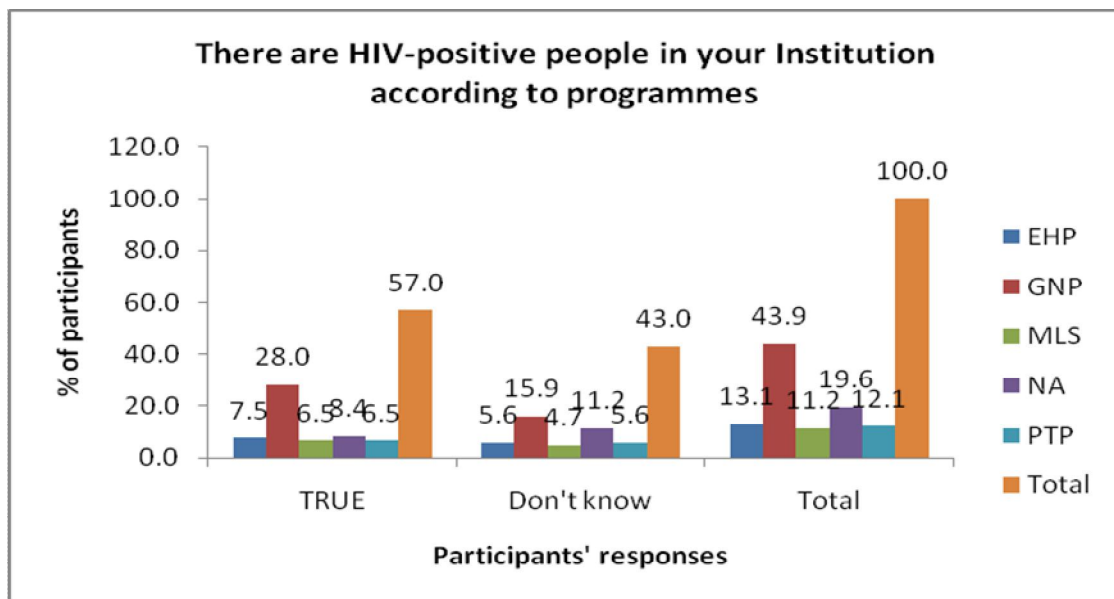


Figure 2 shows the percentages of participants who answered "There are HIV-positive in your institution" according to programmes

This means the learners who answered true are aware that HIV exists in their college, and those who said they did not know might have considered other factors when they answered the question. Unless one really knows the blood results of someone who is HIV-positive, it is not possible to conclude that anyone is HIV-positive and therefore this question will not be rated as to who answered it correctly or badly. People tend to be active in matters that they think are applicable to them therefore for the participants not to be aware of the existence of HIV-positive individuals in their college can have a negative impact on the attempts to fight the infection in their college.

Variable 6 was answered as follows: Year 1, 15.0% answered true, while 19.6% of the participants answered “don’t know”, Year 2, 26.2 % answered “true “ while 13.1% answered “don’t know and finally year 3, 15.9% answered “true” and 10.3% answered “don’t know”.

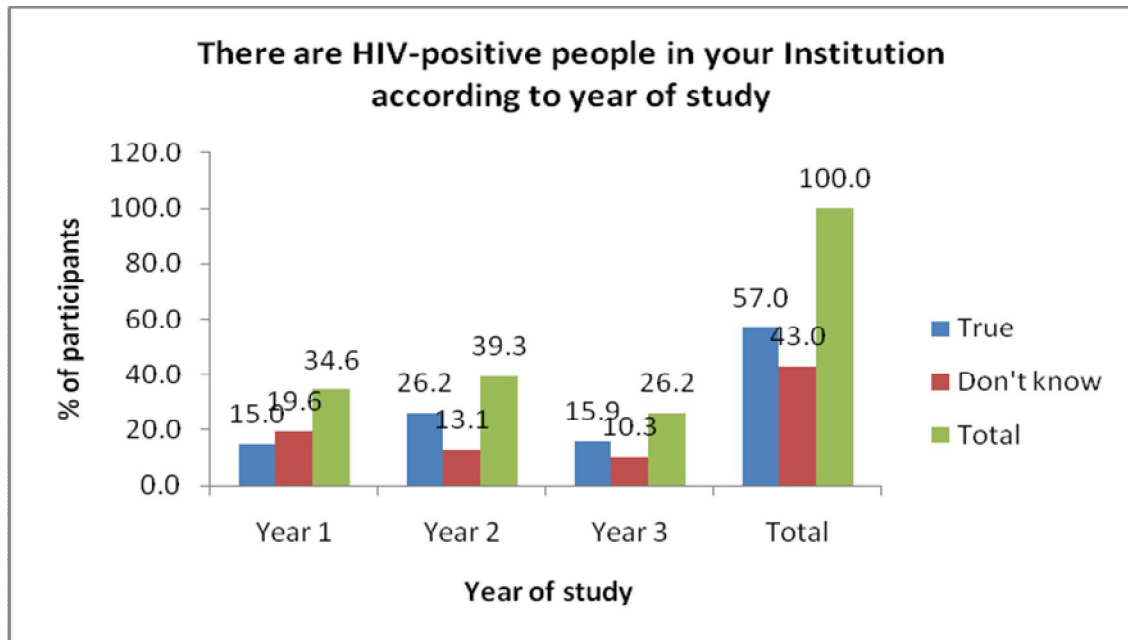


Figure 3 shows the percentages of participants who answered "There are HIV-positive people in your institution" according to year of study

The number of participants who answered “don’t know” to the statement “there are HIV-positive people in your institution” decreases as the level of study advances. People are becoming aware of the existence of HIV-positive individuals in their college as the level of study advances. This could be related to the increasing knowledge and social factors.

Variable 7 “HIV infection can be prevented”.

93.6% of the participants answered “true” and correctly, 1.8% answered “don’t know” and 4.6% answered “false”.

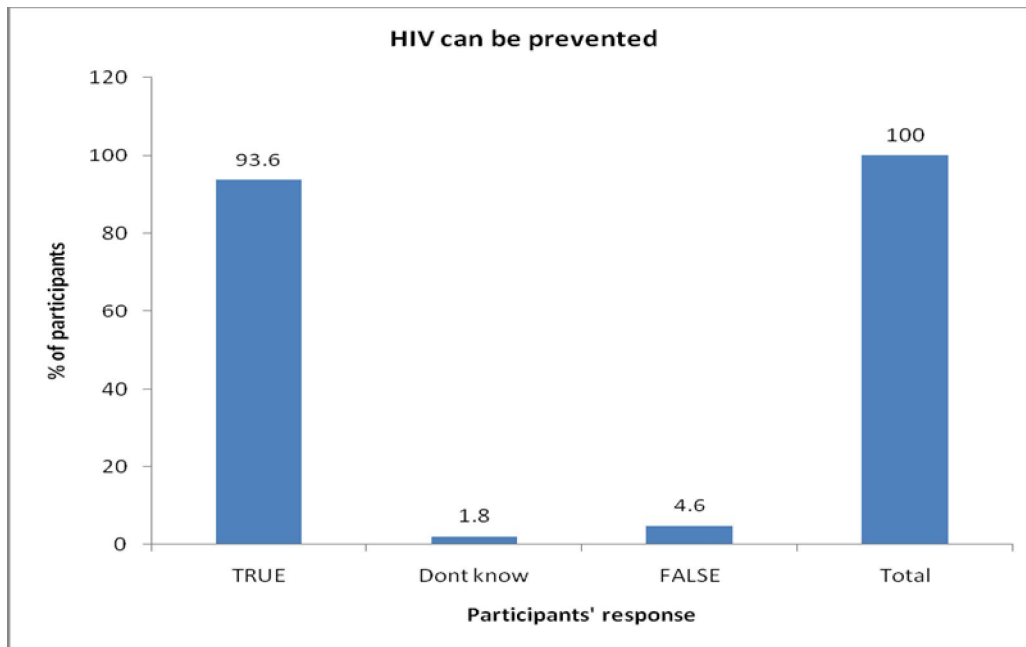


Figure 4 shows the percentage of the participants who answered "HIV can be prevented"

This means that 93.6% knew that HIV can be prevented and 6.4% did not know that HIV can be prevented. For those who answered “don’t know” it could either mean that they are not sure whether it is true that whatever strategies of prevention they probably have heard of are effective or not. This is not considered satisfactory for the people in the Health Sciences College that are supposed to be educating other people about HIV prevention.

Variable 8 and 9 “a person can get HIV by using a cup or plate that has been used by a person with HIV” and “a person can get HIV by sitting in a hot tub or swimming pool with a person who has HIV”

These variables were answered “false” and correctly by 95.4% and 90.8% while 3.7% answered “true”, and 0.9% and 5.5% answered “don’t know” respectively.

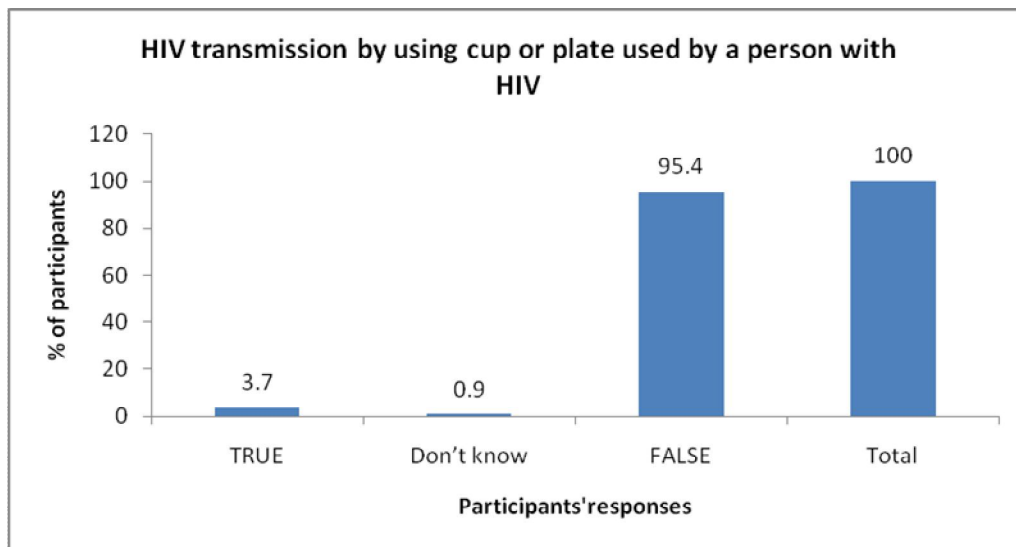


Figure 5 shows the percentage of participants who answered "A person can get HIV by using a cup or plate that has been used by a person with HIV/AIDS"

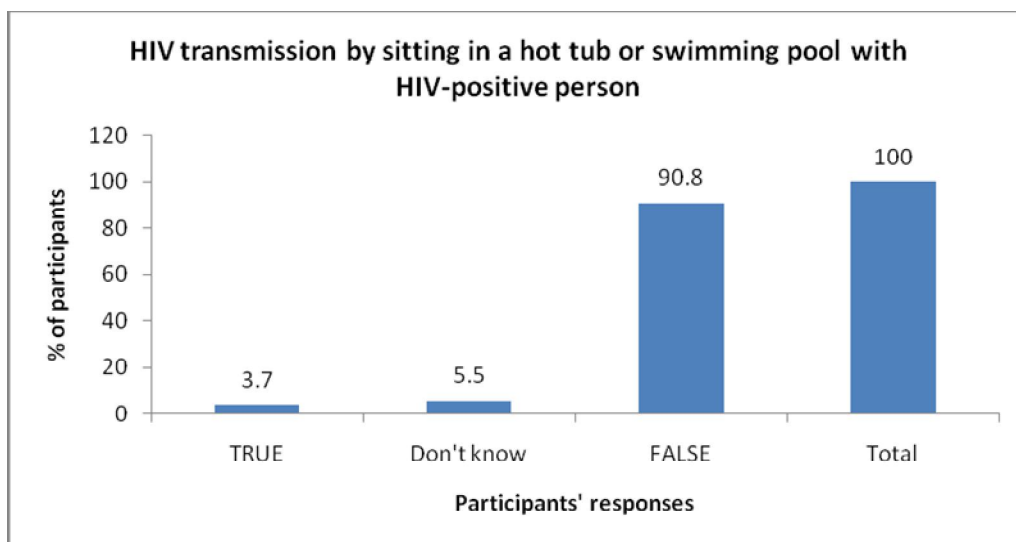


Figure 6 shows percentages of the participants who answered "A person can get HIV by sitting in a hot tub or swimming pool with a person who has HIV"

The answers to these two questions indicate that there are those learners who do not know how HIV can be transmitted from one person to another, such people can easily pass on the wrong information and lead to HIV-positive being excluded from their social life.

Variable 10 “having sex with a virgin can cure HIV/AIDS”

This variable was answered true by 2.8% and false by 97.2% of the participants.

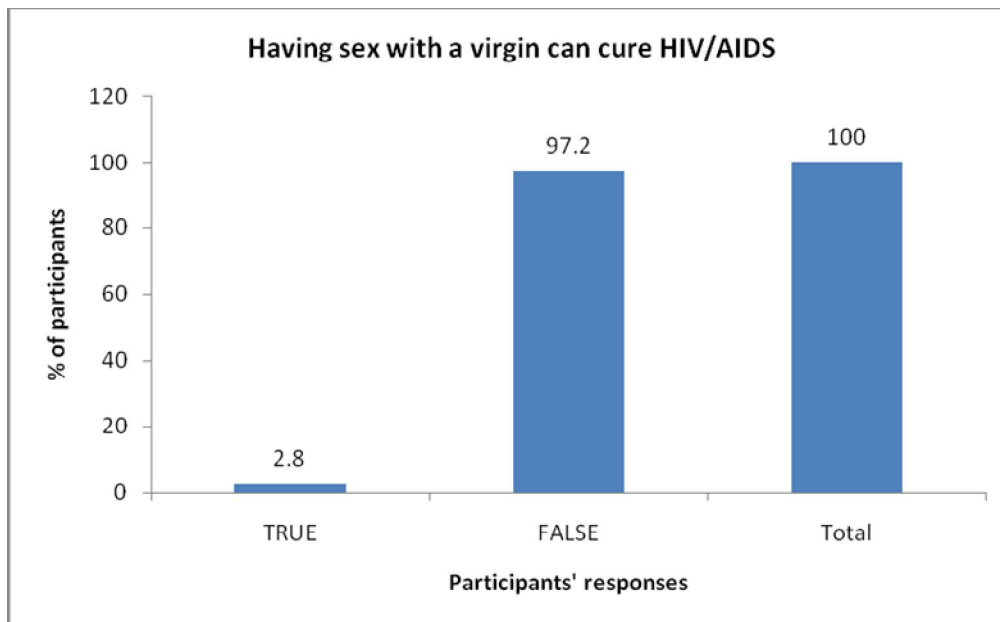


Figure 7 shows the percentage of the participants who answered "having sex with a virgin can cure HIV/AIDS"

This is one of the myths that can contribute to the spread of HIV if the learners were to believe that it is true. It would be necessary to convey the true facts in order to ensure the safety of the younger generation. It is encouraging to find that 97.2% of the participants understand that this practise cannot work. On the other hand the remaining 2.8% can still be harmful especially when they are health care personnel.

Variable 12 “a person can be infected with HIV and still look healthy”

Variable 12 was answered “true” and correctly by 98.2% of the participants. 1.8% regarded statement as “false” and hence were wrong.

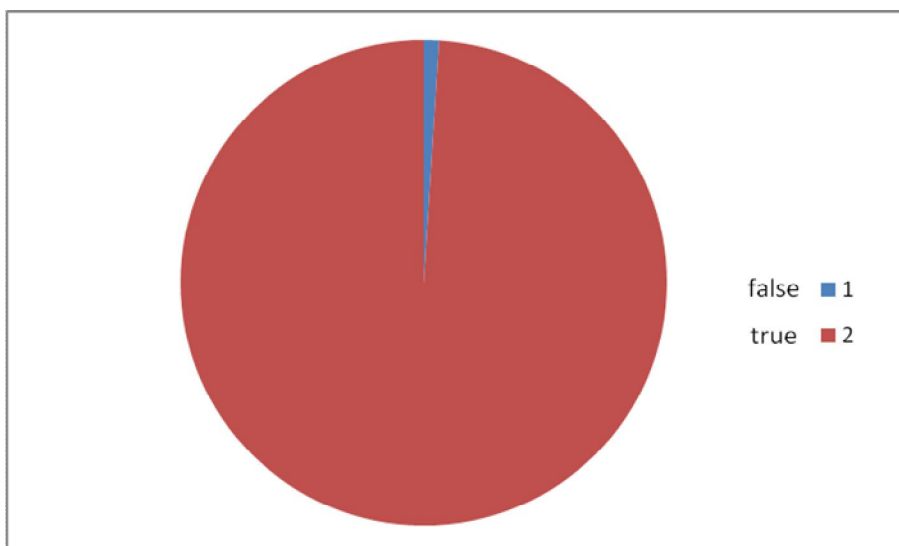


Figure 8 A pie chart showing the participants who answered "a person can be infected with HIV and still look healthy"

This means that 98.2% of the participants are aware that HIV-positive individual does not necessarily have to look ill. If people believe that for one to be HIV-positive s/he has to look ill that can further fuel the spread of HIV.

Variable 14 “coughing and sneezing can spread HIV”

This variable was answered “false”, and hence correctly by 97.2% of the participants, 1.8% answered “true” while 0.9% of the participants did not know.

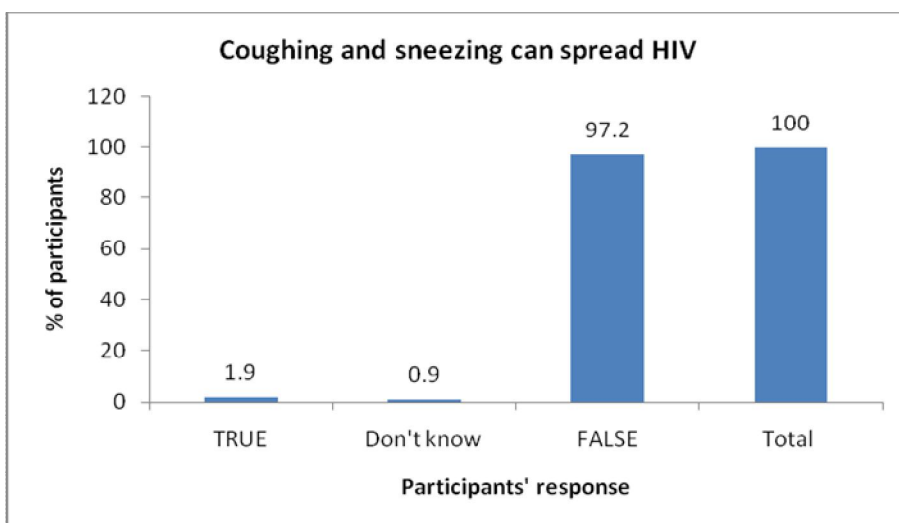


Figure 9 shows the percentages of participants who answered "coughing and sneezing can spread HIV".

This shows that only 2.7% of the participants did not know the correct answer. These results further show that knowledge about transmission of HIV from one person to another is still not at 100%. This can be harmful to the HIV-infected individuals.

Variables 16, 23 and 26, “a woman who has been raped has a right to receive immediate HIV-preventive treatment”, “HIV-positive mother can have a child who is HIV-negative” and “Life-skills education can help in the prevention of HIV/AIDS”

These variables were answered “true” and correctly by 98.1% of the participants, 0.9% answered “don’t know” and “false”.

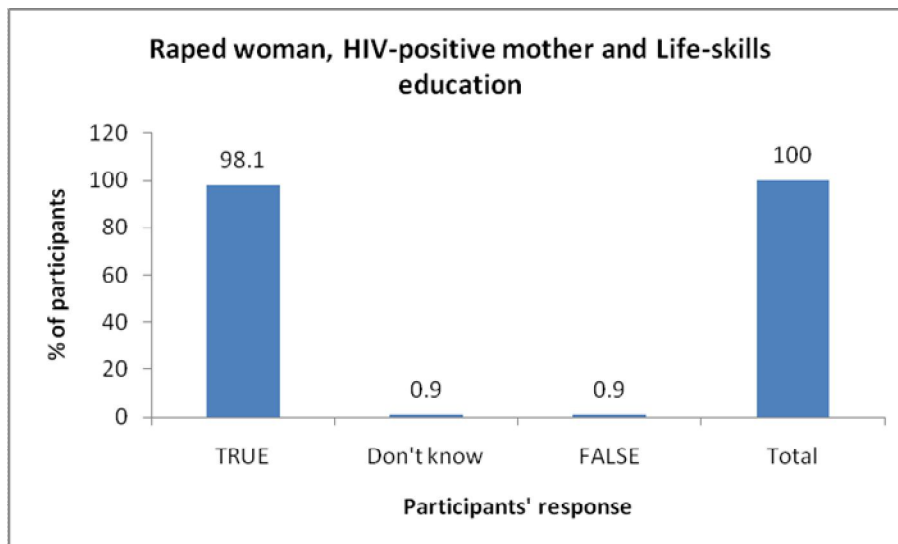


Figure 10 shows the percentage of participants who answered the following statements "A woman who has been raped has a right to receive immediate HIV-preventive treatment", "HIV-positive mother can have a child who is HIV-negative" and "Life-skills education can help in the prevention of HIV/AIDS".

This could mean that 1.8% did not know about PEP after rape, PMTCT and life-skills as a preventive strategy to HIV/AIDS. These results show that the participants have good

knowledge regarding the above questions however prevention strategies still need to be emphasised.

Variable 17 “a person can get HIV from oral sex”.

This variable was answered “true” by 72.2% of the participants. 16.7% and 11.1% answered “don’t know” and “false” respectively. The results were then analysed according to programmes and years of study. 12.1% of the participants from the general nursing programme answered “don’t know” and “false” to this question and 8.4% and 5.6% from the environmental health sciences and pharmacy technology respectively answered the same. 0.9% of the medical laboratory sciences answered “false” while 0.9% of the nursing assistants answered “don’t know”.

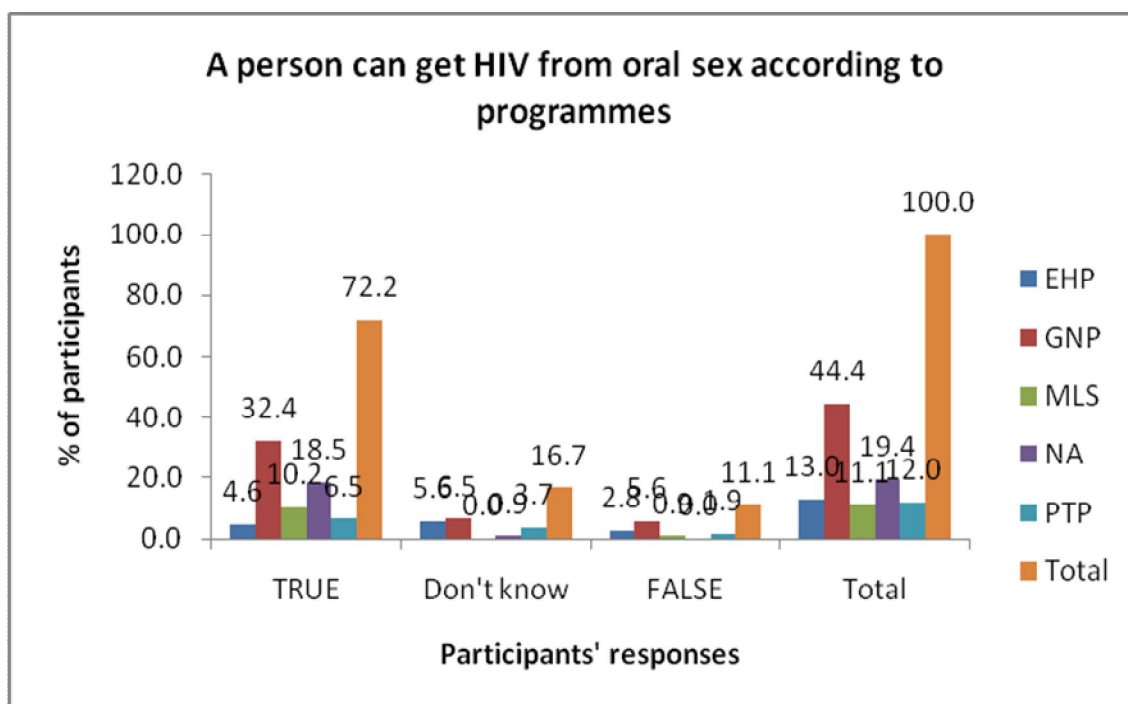


Figure 11 shows percentages of participants who answered "a person can get HIV from oral sex" analysed according to programmes

This means that this question was answered well by the nursing assistant participants and medical laboratory sciences. General nursing had the highest percentage of the people who answered this question wrongly. This is the worst answered question indicating that the most

learners are not able to relate oral sex with the transmission of HIV. The large number of the general nursing participants had been considered when this remark was made.

Of the participants who had answered this variable “true” 25.9% were from year- 1 and 2 had while 20.4 % of the participants were from year 3 of study. Year- 1, 2 and 3 had answered “don’t know” in these proportions 5.6%, 7.4% and 3.7% respectively. Those who answered “false” were 2.8% year 1, 6.5% year 2 and 1.9% year 3.

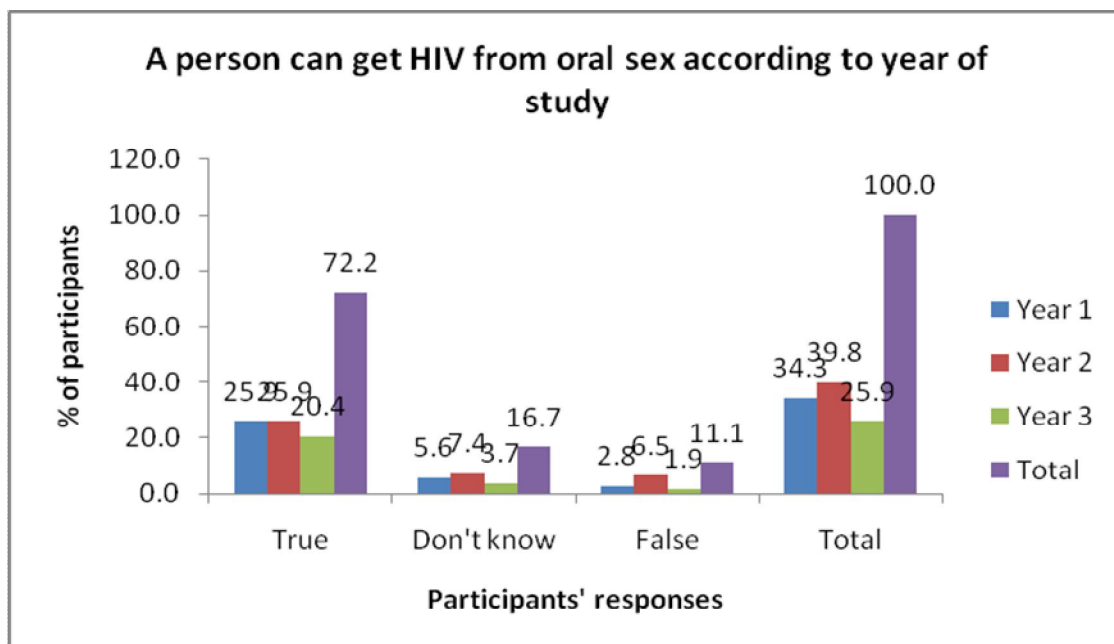


Figure 12 shows percentages of participants who answered "a person can get HIV from oral sex" according to year of study

From figure 12 above, the participants in Year 2 of their studies were leading the two groups in terms of those who did not know the correct answer. The participants from the Year 3 who did not know the answer were comparatively few. The fact that year 3 learners appeared to be better informed, can be related to the fact that they had all covered HIV/AIDS in their course during their studies but the pattern between year 1 and year 2 cannot be accounted for as some year 2 learners have already done HIV/AIDS in their course at college and the year1 learners have not.

Knowledge level is regarded to be low on variable 17 “HIV can be transmitted by oral sex”. The low knowledge can be harmful to the learners as most of them are in age where they are

likely to be sexually active and therefore need to know facts about sexual transmission as it is the main driving force behind HIV infection. The low level of knowledge among the participants can be dangerous to the society considering that they are considered as health care practitioners already by the society.

Variable 18 “HIV can be transmitted from the mother to child through breastfeeding”

Variable 18 was answered “true” by 89.9%, “don’t know” by 5.5% and “false” by 4.6%. The analysis based on the programmes was as follows: 3.7% and 0.9% of the participants in the environmental health sciences answered “don’t know” and “false” respectively. 2.8% general nursing participants had answered “false”. All nursing assistant participants had answered true and correctly. 0.9% of the pharmacy technology participants had answered “don’t know”.

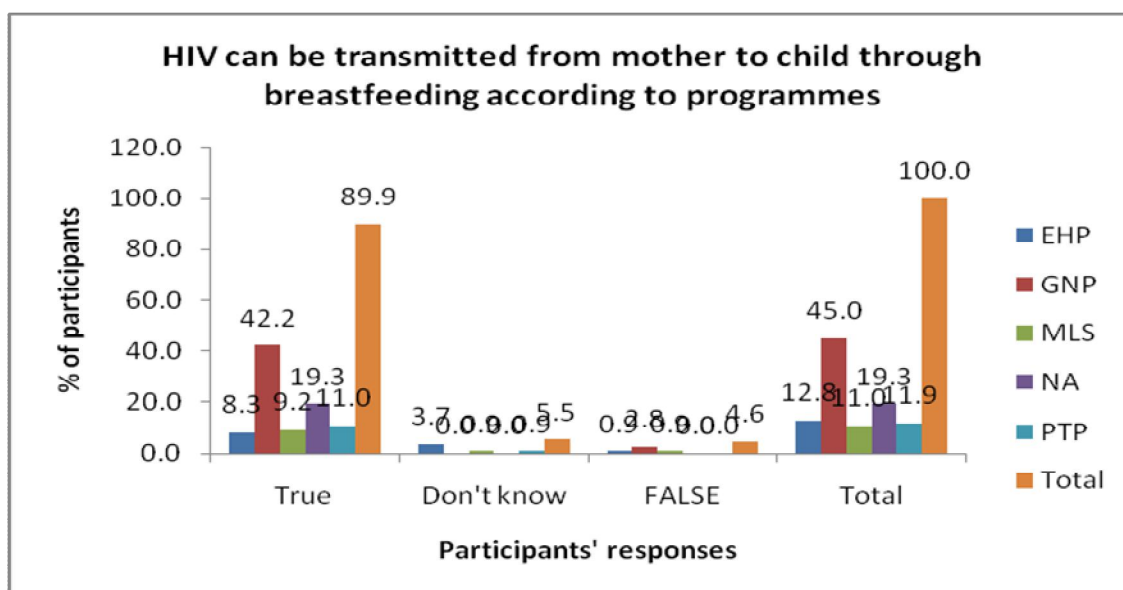


Figure 13 shows the percentage of participants who answered "HIV can be transmitted from mother to child during breastfeeding" according to programmes.

In this question nursing assistant participants all answered correctly, and emerged as the leading best performer in this question, followed by pharmacy technology, general nursing and medical laboratory sciences that are almost similar. Environmental health sciences presented as the programme with leading wrong answers. The results show that knowledge on HIV transmission from mother to child need to be improved also considering that the

learners are at child-bearing age. The lack of knowledge can be harmful to them as well as the communities. More emphasise should be made on HIV transmission from mother to child.

The participants who answered “true” to variable 18 were 29.4% year 1, 36.7% year 2 and 23.9% year 3. The following answered “don’t know” 1.8% year 1, 2.8% year 2 and 0.9% year 3. The following had answered “false” 2.8% year 1, 0.0% year 2, and 1.8% year 3.

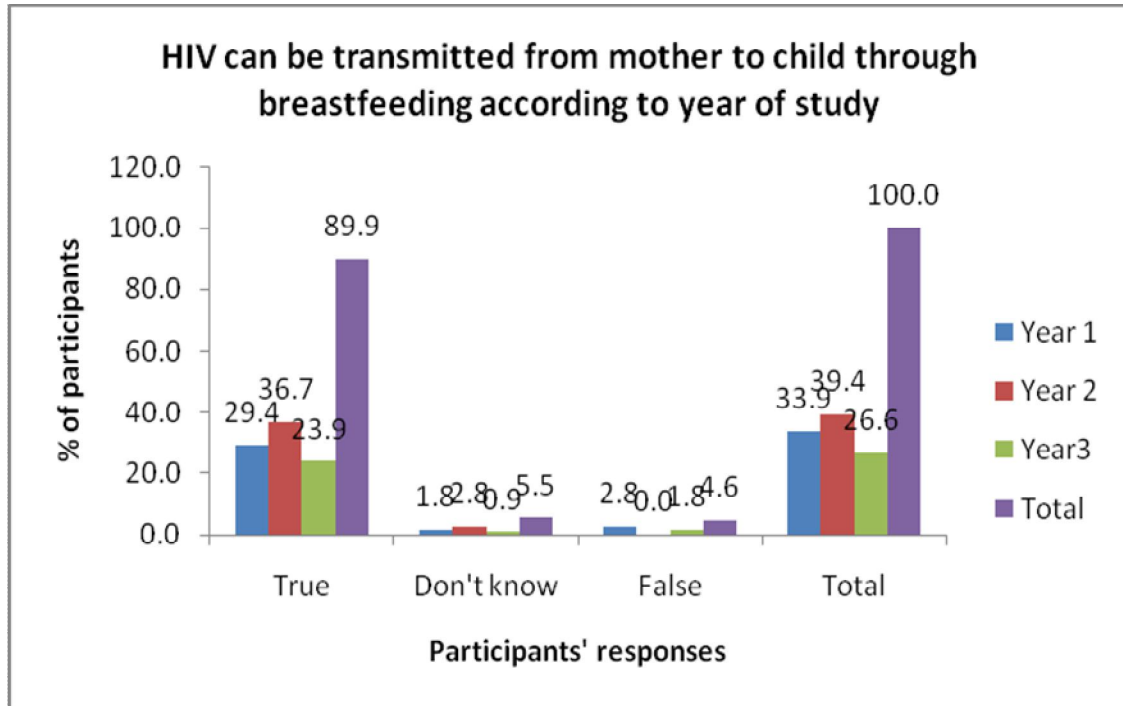


Figure 14 shows the percentage of participants who answered "HIV can be transmitted from mother to child during breastfeeding" according to year of study.

From the figure 14, it is evident that most of the participants who did not know that HIV can be transmitted from mother to child during breastfeeding are from the first year of study. The participants from study years 2 and 3 were at a similar level of knowledge. The results are not acceptable considering that year 3 learners had all been exposed to HIV course compared to other groups that may have not been exposed to the course. The year 3 are the finalists who are about to go to the clinical area that small number of participants who did not know the correct answer could be dangerous to other people’s health.

Variable 19 “Patients with TB also have HIV”

This variable was answered “false” and correctly by 76.1%, “true” by 18.3% and “don’t know” by 5.5%. This is the second worst performed question where only 76.1% answered the question correctly. The participants from the environmental health sciences had answered as follows: 0.9% “true”, 1.8% “don’t know” and 10.1% “false”. In general nursing the following scores were obtained: 9.2% “true”, 0.9% “don’t know” and 34.9% “false”. The answers for the participants from medical laboratory sciences were: 2.8% “true” and 8.3% “false”. Participants from the nursing assistants had the following answers: 2.8% “true”, 1.8% “don’t know” and 14.7% “false”. Finally the pharmacy technology participants had answered in the following manner 2.8% “true”, 0.9% “don’t know” and 8.3% “false”.

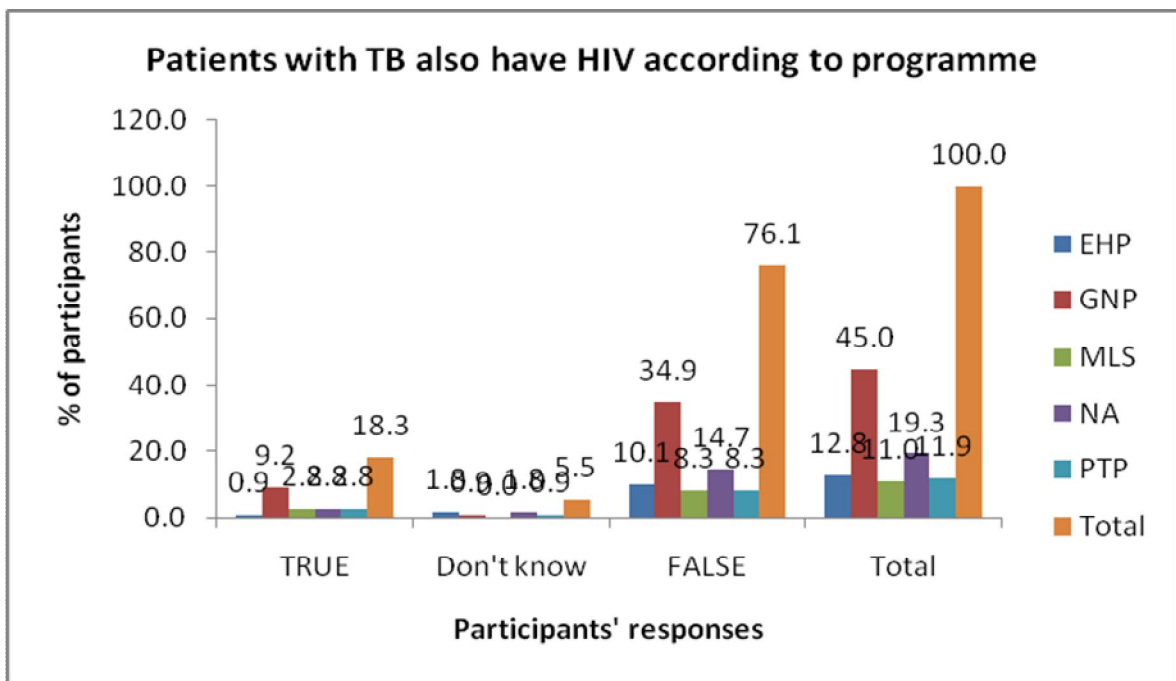


Figure 15 shows the percentages of participants who answered "patients with TB also have HIV" according to programmes.

These results made pharmacy technology participants to be the at the lowest ranking programme followed by medical laboratory sciences, nursing assistants then general nursing and with environmental health ranking highest in this question. It is surprising that 97.2% of the participants had answered “true” and were correct to the statement “HIV-positive people

tend to get TB more easily” and have only 76.1% of the participants answering false and correct to the statement “patients with TB also have HIV”.

The researcher had expected to have the similar percentages of correct answers to those statements as answering “true” to one statement meant “false” to the other statement.

When comparing the participants who answered “patients with TB also have HIV” according to year of study, the following results were obtained: 5.5% of the participants who answered “true” were from year 1, 8.3% and 4.6% of the participants were from year 2 and year 3 respectively. 2.8% of the participants from year 1 and from year 2 respectively had answered “don’t know”. 28.4%, 25.7% and 22% of the participants from year 1, 2 and 3 respectively had answered “false” and were correct. Only 4.6% of the participants who did not know the answer were from year 3, compared to 11.1% and 8.3% who were from year 2 and year 1 respectively.

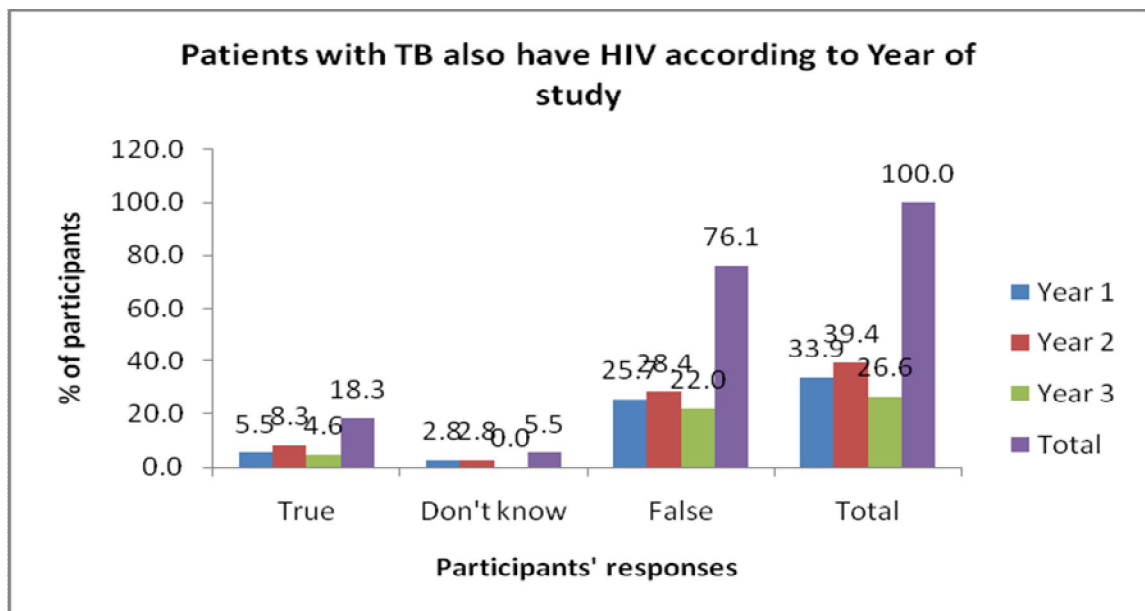


Figure 16 shows the percentages of participants who answered "patients with TB also have HIV" according to year of study.

This means that there are many participants from year 2 who did not know the correct, followed by participants from year 1, year 3 had the least of the participants who did not know the correct answer comparatively. The pattern of the results cannot be accounted for.

These results show that HIV/TB co-infection is not clear to many participants and that may affect their interpretation of the situation and hence their care for other people.

Variable 15 and 20, “you can get HIV through contact with infected blood” and “HIV-positive persons tend to get TB more easily”

These variables were answered “true” and were correctly by 97.2%, 0.9% and 1.8% answered “don’t know” and “false” respectively.

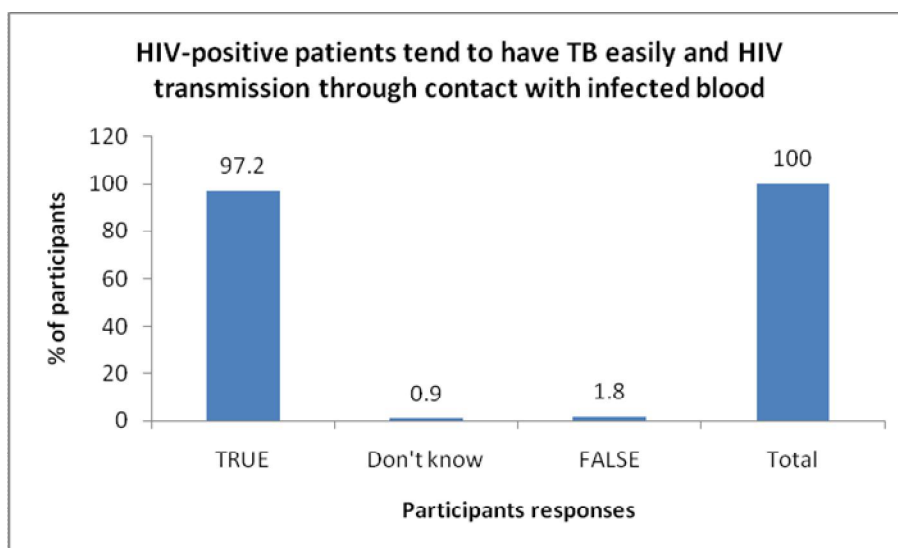


Figure 17 shows percentages of participants who answered "you can get HIV from contact with infected blood" and "HIV-positive people tend to have HIV easily".

These findings show that knowledge is satisfactory for the statements “HIV-positive person tend to get TB easily” and “you can get HIV through contact with infected blood”, however 2.7% that do not know the correct answer can be at the risk of infection when they contact blood. In as much as the question on HIV transmission through contact with blood has been answered correctly by 97.2% of the participants, the remaining 2.8% who answered wrongly can be a havoc to themselves and their clients as contact with infected blood is the most efficient way of transmitting HIV.

Variable 21 “you would stay with a colleague who is HIV-positive in the room if you are HIV-negative”

This variable was answered by “true” 99.1% of the participants and 0.9% of the participants answered “false”.

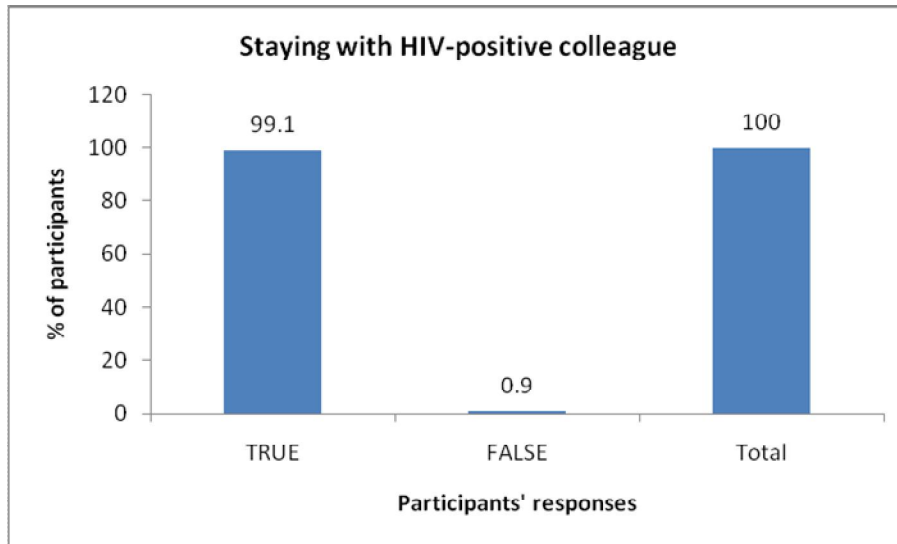


Figure 18 shows the percentages of the participants' responses to the statement “you would stay with a colleague who is HIV-positive in the same room if you are HIV-negative”.

This means that participants understand that HIV is not transmitted by staying in the same room. The results agree with those of variable 22 “a person who is HIV-positive needs to be loved and supported” which was answered “true” by 100% of the participants. The results to this statement are satisfactory.

Variable 24 “It is possible for one partner to be HIV-negative while the other is HIV-positive”

This variable was answered “true” and correctly by 94.3% of the participants while 2.8% answered “don’t know” and “false” respectively.

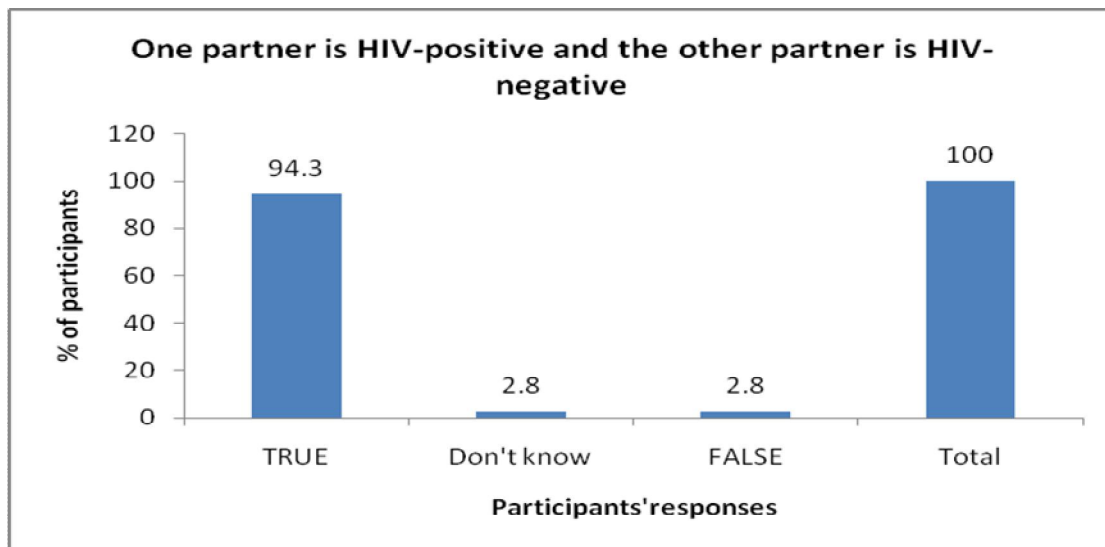


Figure 19 shows the percentages of participants who answered "it is possible for one partner to be HIV-negative while the other partner is HIV-positive".

These results show that 5.6% of the participants do not know about discordant couples and can therefore not reinforce positive prevention of HIV either for themselves or their clients. Emphasis should be made on the education with regard to discordant couples.

Variable 25 "Health care workers should report any needle-prick that occurs while on duty"

97.2% of the participants answered true and were correct, while 1.9% and 0.9% of the participants answered "don't know" and "false" respectively.

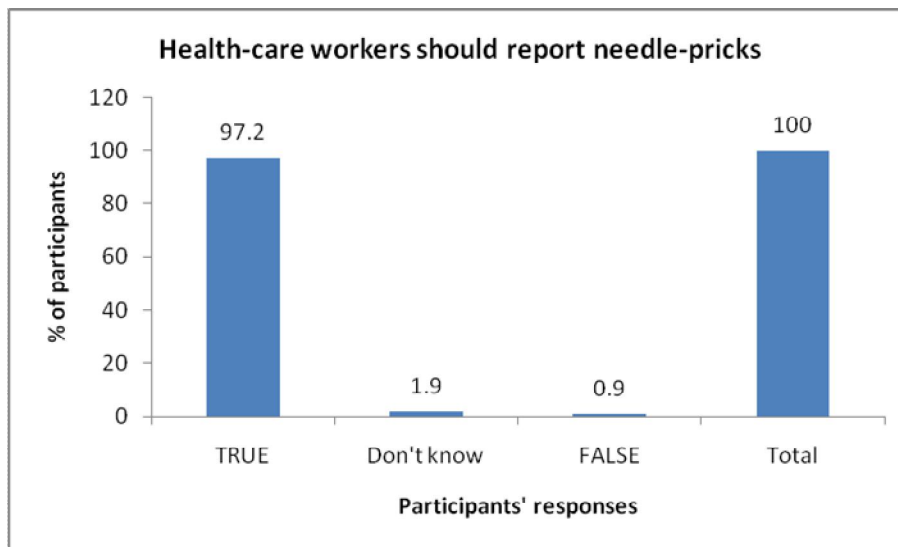


Figure 20 shows the percentages of the participants' responses to the statement "Health-care workers should report any needle-prick that occurs while on duty".

These results show that 2.8% of the participants did not know the correct answer and that could be dangerous to them should they be pricked by the needles or sharp instruments with the blood of patients as they might not report on time and therefore be provided with the necessary preventive treatment.

Variable 27 "HIV Testing and Counselling is one of the strategies used in the prevention of HIV/AIDS"

This variable was answered "true" and correctly by 88.7% of the participants, while 3.8% and 7.5% of the participants answered "don't know" and "false" respectively. More than 10% of the participants do not know that HTC is considered as one of the key strategies in the prevention of HIV hence will be further analysed according to programmes and years of study.

When compared according to the programmes all the learners in the nursing assistant programme answered true and were correct. 1.9% of the learners in the general nursing programme and medical laboratory sciences answered "don't know" while 2.8% of the participants in the general nursing and pharmacy technology, and 0.9% of the participants in the environmental health sciences and medical laboratory sciences had answered "false".

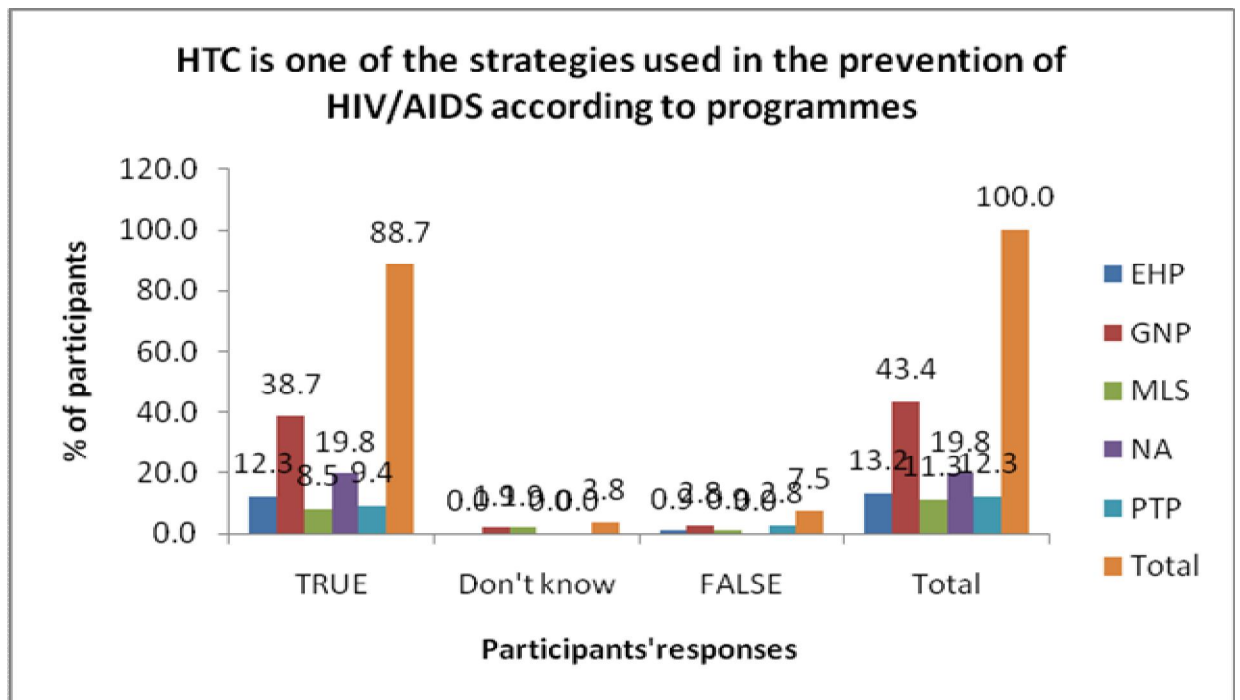


Figure 18 shows percentages of participants who answered "HIV Testing and counselling is one of the strategies used in the prevention of HIV/AIDS" according to programmes.

This means that participants in the nursing assistant programme followed by environmental health sciences are more aware of the correct procedures than the rest of the groups. This results are not expected because one believes that nurses should know more about prevention strategies than the rest of the groups based on the clinical exposure that they have during their training.

Findings of the answers to the statement "HIV Testing and Counselling is one of the strategies used in the prevention of HIV/AIDS" according to year of study show that 32.1% of the participants from year 1 answered "true", 34.9% and 21.7% of the participants who answered "true" were from year 2 and year 3 respectively. 2.8% of the participants from years 1 and 2 respectively answered "don't know". 1.9% of the participants from years 1 and 2, and 3.8% and 3 respectively answered "false".

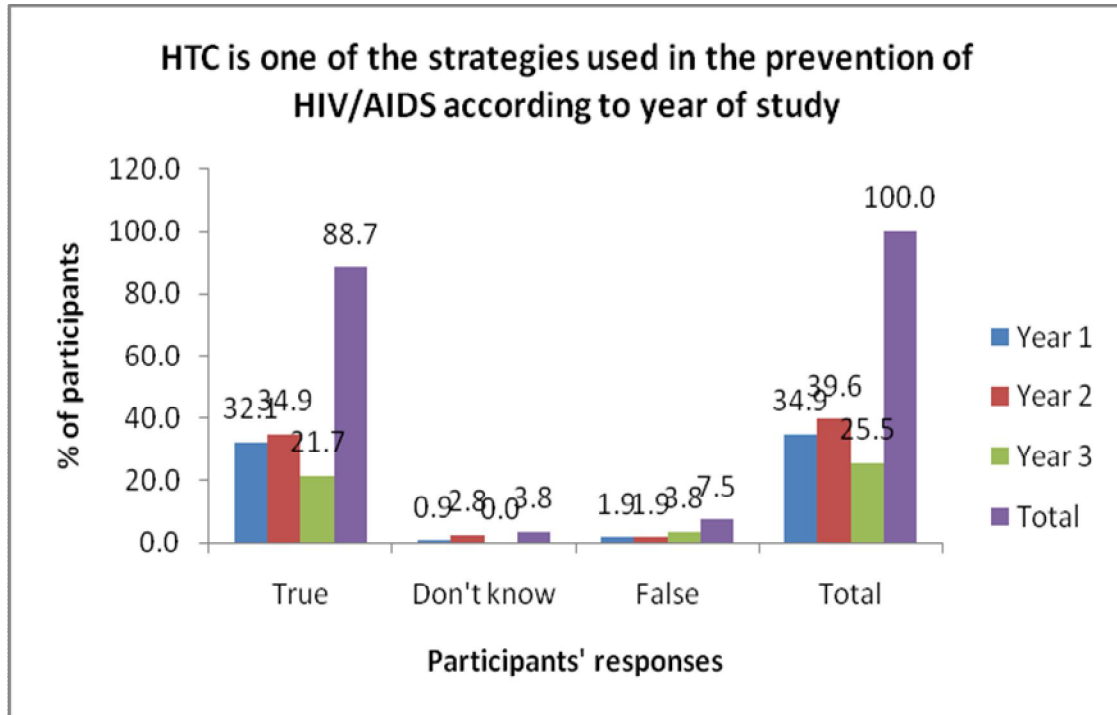


Figure 19 shows percentages of the participants who answered "HIV Testing and counselling is one of the strategies used in the prevention of HIV/AIDS" according to year of study

This means that participants from year 1 lead all the groups in answering “HIV Testing and Counselling is one of the strategies used for prevention of HIV/AIDS” correctly. Participants from year 3 were the least informed on this point. This analysis was made based on the total number of participants per year of study. The results for this question are not as expected and do not provide any logical meaning.

Variable 28 “if your friend is diagnosed HIV-positive your friendship should stop immediately”

This variable was answered “false” and correctly by 95.3% of the participants, 3.8% and 0.9% of the participants had answered “true” and “don’t know” respectively.

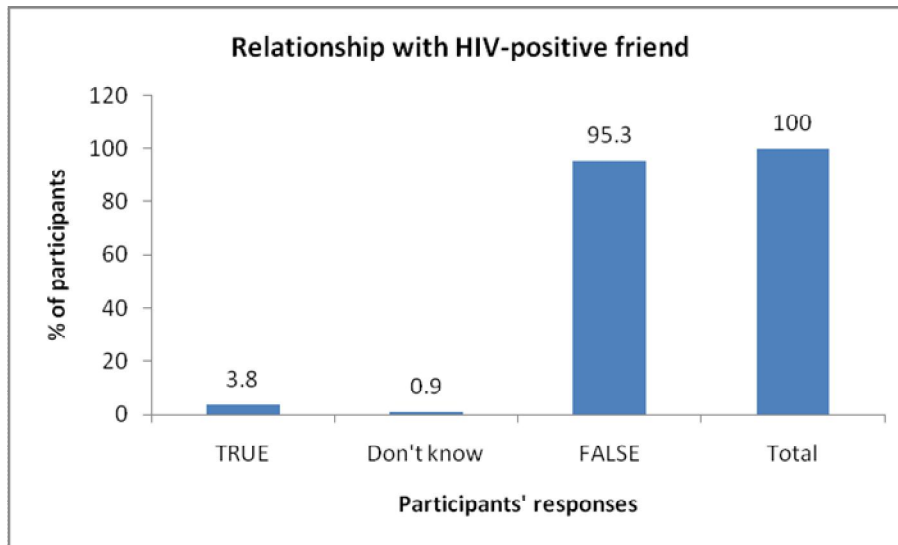


Figure 20 shows the percentages of the participants who answered "If your friend is diagnosed HIV-positive your relationship should stop immediately".

The researcher is of the opinion that there is still some degree of stigmatisation of HIV/AIDS among the learners. Based on these answers, one does not want to be associated with someone who is HIV-positive.

The findings here are a bit confusing based on the fact that 100% of the participants answered "true" to the statement "people who are HIV-positive need to be loved and supported" and as many as 99.1% of the participants answered "true" to the statement "you would stay with a colleague who is HIV-positive in the same room if you are HIV-negative". Then, if 3.8% of the participants answer "true" to the statement "if your friend is diagnosed HIV-positive your friendship should stop immediately" it is somehow confusing.

Variable 29 "HIV is considered as a chronic disease not as a death sentence"

90.8% of the participants answered "true" and 3.7% and 5.5% answered "don't know" and "false" respectively.

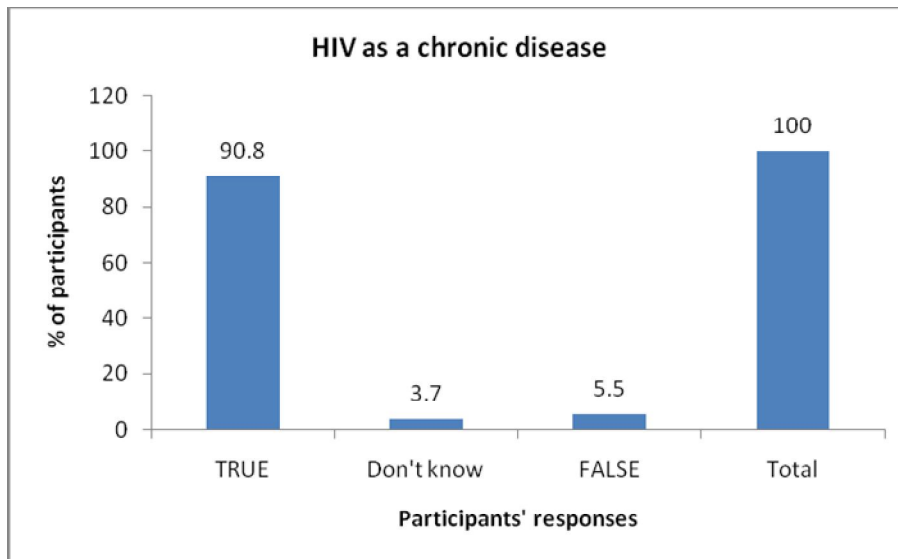


Figure 21 shows the percentages for participants who answered "HIV is considered as a chronic disease not as death sentence".

These results mean that 9.2% of the participants do not consider HIV as a chronic disease. These can have a negative impact on such individuals if diagnosed HIV-positive on accepting the status and carrying on with life positively.

Variable 30 “once one has started taking ARV treatment for HIV, one has to take it for life”

This variable was answered “true” and correctly by 88.1% of the participants while 5.5% and 6.4% answered “don’t know” and “false” respectively. Over 10% of the participants did not know the correct answer. When comparing the findings from different programmes all participants in the pharmacy programme answered “true” and were correct, while 3.7% and 1.8% of the participants from the environmental health sciences and generally nursing respectively answered “don’t know”. 2.8% of the participants from the general nursing and nursing assistant together with 0.9% of the medical laboratory sciences answered “false”.

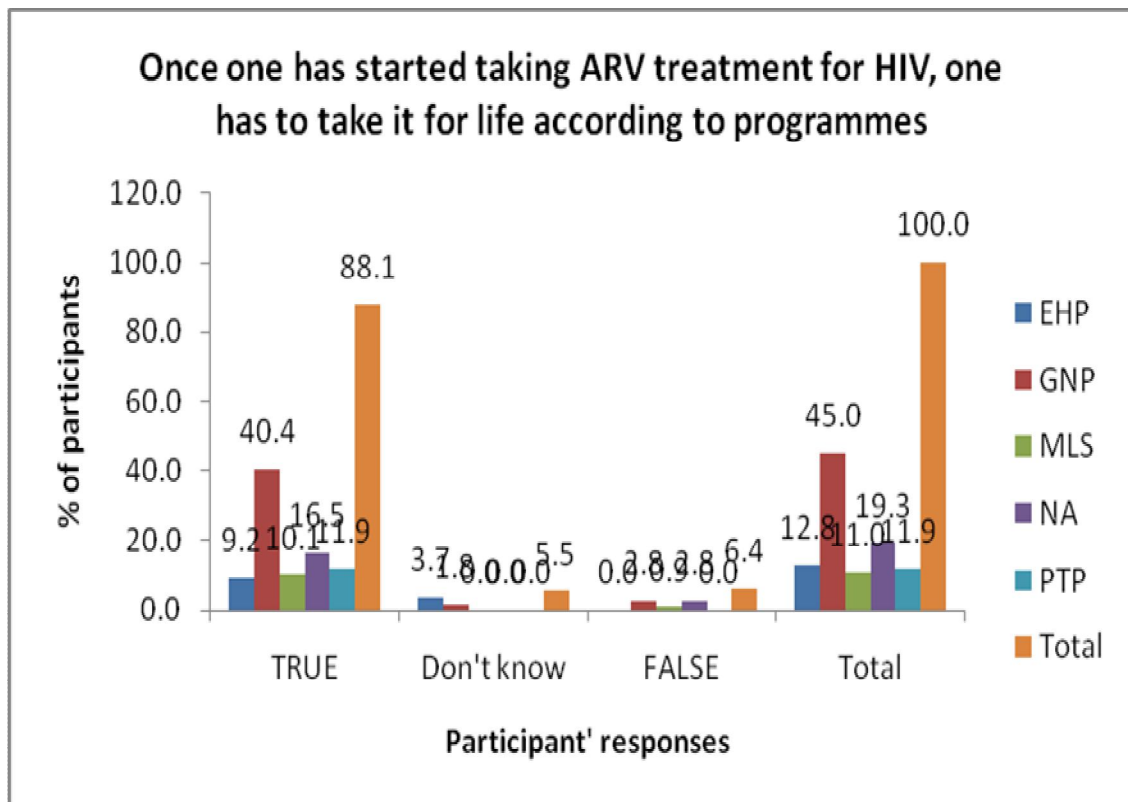


Figure 22 shows the percentages of participants who answered "once one has started taking ARV treatment for HIV, one has to take it for life" according to programmes.

This means that pharmacy technology learners knew the correct answer followed by medical laboratory sciences as indicated by figure 25 above. The results are acceptable as one expects pharmacy department to concentrate more on the functioning of the drugs. The current system in Lesotho is such that ARV adherence counselling is carried out by the pharmacy department. On the other hand it is expected that nurses being the people who make the most contact with the patient has to know a lot about the use of ARVs.

Variable 30 "once one has started taking ARV treatment for HIV, one has to take it for life" based on the year of study was answered as follows: year 1, 26.6% answered "true", 4.6%, "don't know" and 2.8% "false". Year 2 answered as follows: 34.9%, "true", 0.9% "don't know" and 3.7% answered "false". All year 3 participants answered "true" and were correct.

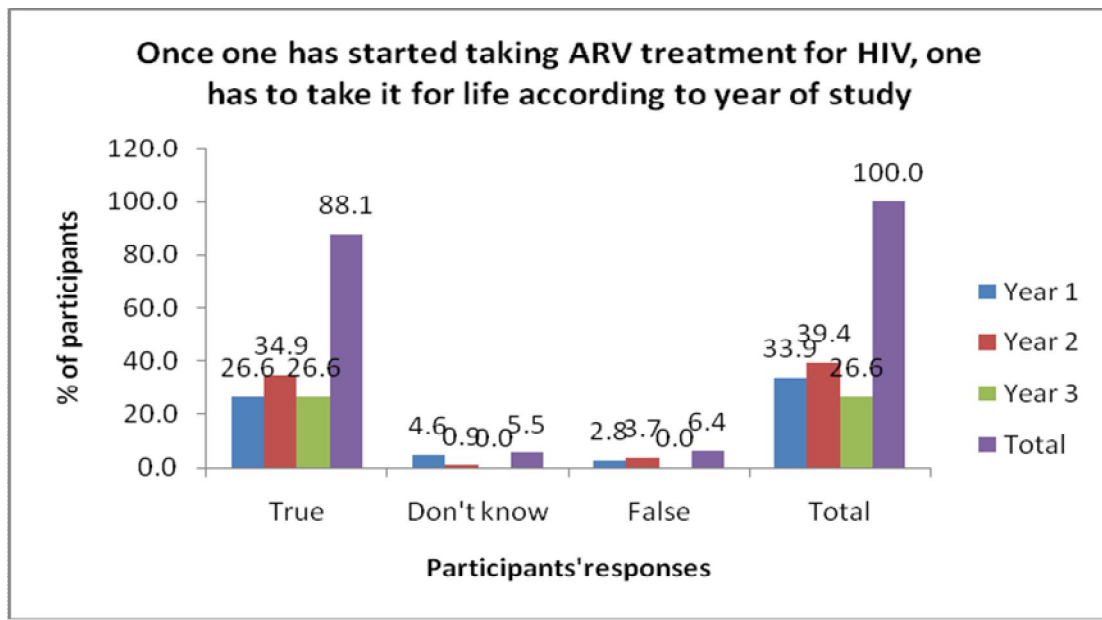


Figure 23 shows percentages for participants who answered "once one has started taking ARV treatment for HIV, one has to take it for life" according to

In this variable year 3 had all answered correctly, followed by year 2. Year 1 appeared to be the least informed. These results are as expected because year 1 learners have not yet been exposed to an HIV/AIDS course at the college, while some Year 2 participants had already done the course. All year 3 learners had been through the HIV/AIDS course and they had already been through several clinical experiences compared to the other groups. These findings further explain the pattern observed in analysis based on programmes as the first year nursing learners have not dealt with the effects of drugs.

The findings show that from 11.9% of the participants who did not know the correct answer 7.4% were from the year1 and 4.6% were from the year 2 of the study. The researcher is therefore of the opinion that the results are acceptable. However considering HIV prevalences in the country people in the health cadres should be exposed to HIV education earlier in the study as the learners go for clinical practice from their first year of study. This study was conducted while general nursing year 1 and 2 were at the clinical area hence the need to improve their knowledge levels early in their training.

4.2.2 Research findings of phase 2 and literature control

4.2.2.1 Description of the setting

The student leaders were approached and the information as in the information leaflet of the consent forms was provided to them and they were allowed to ask questions which were answered. They were requested to participate in the study. A total of fifteen student leaders were approached, however, only ten decided to participate in the study. A total of two focus group discussions were held with the Student Representative Council (SRC) and the Class Representatives and not with the leaders of the Christian- and other associations as it was planned. The reason for not using the leaders for Christian associations and other associations was that such were reported not to be functional at the time of data collection. Each focus group consisted of five members from the SRC and the Class Representatives. The focus group discussions took about 45 minutes each. The focus group discussions were held in a warm classroom of the choice of the participants. There was very minimal noise from outside and the discussions could proceed without disturbance. The permission to use a voice recorder was obtained from the participants. The participants were ensured that the tapes would be used for the purpose of the study only and only the research team would have access to them. The participants were also ensured that they did not have to agree on anything or to reach any consensus. The participants' ideas were treated as equally important and everybody was encouraged to speak his/her views. The researcher and the participants were sitting in such a way that they formed a circle and the voice recorder was placed in the centre. The main question was asked "What are your needs in this college regarding HIV/AIDS prevention and care?" The researcher asked a few additional and relevant questions as the discussion went on, especially when there was a pause, to facilitate the discussion and to ask for clarifications. The researcher also took notes as the discussions proceeded, and such permission had also been obtained from the participants prior to the onset of the discussions.

Data analysis began with verbatim transcription of the data recorded on the tape. Data were then arranged in table form and categories and themes could be identified. Only data that directly answered the research question were classified into a theme and category. The data were analysed and independently co-coded by a qualitative research expert and the consensus between the researcher and the co-coder resulted in two themes namely: prevention and care, and eight categories with sub-categories under prevention and three categories under care.

Initially the researcher had thought she would name categories according to learners' direct words, however, it became difficult to do that because the same category would be expressed by different people in different words, sometimes even the same participant would use different words to express the same category at different times during the discussion.

4.2.2.2 The research findings of phase 2 of the study

Theme 1 – Prevention

Prevention appeared to be the main theme in the fight against HIV/AIDS. This could be evidenced by the number of the categories classified under it. The learners emphasised prevention as being the backbone in addressing HIV issues in their college. Literature also supported the same views, for example several governments acknowledged that prevention of HIV infection as the mainstay of the national, regional and international response to the epidemic (United Nations, 2001:10). All countries were urged to continue to emphasise widespread and effective prevention strategies, including awareness-raising campaigns through education, nutrition, information and health care services (United Nations, 2001:10). Prevention of HIV transmission has also been described as one of the key strategies that would be likely to significantly exercise an impact on the HIV and AIDS epidemic through reduction in new cases (NAC 2007a:16). This shows that the need for HIV prevention is not only recognised by the learners in this HEI but it is indeed a global issue.

The categories under prevention were arranged as presented below. The discussion below will be accompanied by selected direct quotations from the group discussion sessions to substantiate the statements.

Category 1: Education

Education was found to be the greatest need among the learners with about 14 sub-categories. The first participant in the discussion said:

“Firstly I think we need HIV education”.

This was an interesting category because despite the fact that some learners were convinced that they needed education, some said their main need was to apply their knowledge in practice. For example one SRC member said,

“It is true we may have education, quality education, but how can the learners be influenced to put their knowledge into practice, if we say HIV can be prevented through abstinence, let us see that being practised...”.

On the same issue of education another participant said:

“I want to add on education since we may think it’s all learners who know about HIV, how it gets transmitted but some learners may get lessons from the radio but only to find they did not take it seriously...”

1. Education regarding mode of transmission

Some learners expressed the need to be educated on modes of transmission of HIV infection. This came up when one student said:

“Most of the time, I have realised that this disease affect us because we work directly with patients during clinical practice and sometimes we come across body fluids not necessarily blood but even sweat from patients and sometimes there is that accident that can happen...”.

Another student responded by saying:

“Right there you see if we have had proper education we would know that urine and sweat will not infect me...”

“This thing is determined by viral load in the fluid, then we can know that the fluids that can infect are this and that. Some people once they come into contact with sweat they already think they may be infected and yet if we have good education we will be free we cannot be threatened unnecessarily”.

The learners expressed the need to be properly educated about how HIV is transmitted as they further said without proper education they can pass on wrong information, for example that all body fluids can transmit HIV.

2. Peer education

The learners also expressed the need to have peer educators in their college.

“The college could seek assistance from some experts who would train other learners to pass knowledge to others”.

“Maybe learners from different levels of study can be recruited and trained so that they can in turn train other learners. Those learners can choose a leader among themselves who would help to ensure that the trainings continue even for subsequent years and that chain should not be broken”.

“... learners should address other learners in the absence of our lecturers so that we can be free and ask questions. Addresses could be done even by learners from other institutions for example NUL”.

The fact that the participants found peer education as a need in HIV prevention and care in their institution is further supported by various authors as follows: AVERT (2010) defines peer education as a process where a group is given information by someone who is a member of the same group or community and who has already been trained in the subject. AVERT (2010) further indicates that young people are strongly influenced by others of their age, something which tends to provide distorted information but that can be harnessed by peer education as the educators can convey accurate information. Kashaga and Leticia (2002) add that in Tanzania over a third of AIDS cases are among 15-35 year olds and indicate that young people should be used as facilitators or as a solution to the current HIV prevalence. In support, Ochanda et al. ([sa]) state that the involvement of learners in peer education is a step in the right direction as peers can educate and convince others of their age better than adults especially because young people in this age group 15-24 are prone to rebelling against almost everything advocated by older generations. Peer student programmes would equip learners

with relevant information, as well as skills to act on the information, and would result in making informed decisions (Williamson, 2002:55).

3. Education on condom usage, post-exposure prophylaxis, microbicides and abstinence

The learners expressed the need to be educated on the importance of condom use, post-exposure prophylaxis, use of microbicides as they have heard over the televisions that microbicides are available and working, with emphasis on abstinence.

“what I have realised and when I talk to people when the relationship is still new people don’t know each other yet, so they condomise, but as the relationship goes on, they never go to test and they no longer use protection as they now think they know each other.”

“I think condoms should be provided because...”

“Still on education health learners must train well because nowadays they tend not to use condoms and use PEP from hospitals and only do sex without condoms not knowing that it might not work sometimes.”

“Another thing I think is that we as HIV/AIDS preventers are afraid to advise people on abstinence rather we encourage them to use other things, not giving emphasis on abstinence and at times they forget those protective things and find themselves at risk.”

“The issue of microbicides should be emphasised that they do not offer 100% protection so that people can not engage in unprotected sex hoping they will be protected. Proper education concerning them.”

The fact that people tend not to use protection as the relationship advances has been indicated as one of the drivers of the spread of HIV infection. United Nations Lesotho (2009:15) states that condom use remains low with regular partners. Nkhumane (2008:75) supports United Nations by stating that women tend to trust their partners and do nothing to encourage safe

sex as the relationship progresses. United Nations Lesotho (2009:15) considers lower levels of consistent and correct condom use as one of the risk factors in the transmission of HIV.

PEP is used to prevent HIV infection if one is accidentally exposed to the virus (Phela, 2008:39). Indications for PEP are occupational exposure like needle pricks and accidents, and sexual violence such as rape and incest (Phela, 2008:39 and NAC 2008:25). HIV transmission can be prevented or reduced if PEP drugs are administered within two hours of exposure, failing which it should be within 72 hours (NAC, 2007a:29). It is evident from the needs of the learners and as substantiated by the literature that proper education is required regarding use of condoms, microbicide and PEP as some now seem to replace one another whereas PEP is not meant to be used regularly. If learners believe that such important drugs are being misused then proper education is needed. It can also be realised that knowledge is still insufficient if a person would still want to travel from one health provider to another simply because he/she does not want people to know that he/she might be HIV-positive, and at a stage when intervention (e.g. PEP treatment) is already of paramount importance. That would mean that the person did not grasp the importance of the time factor.

“I remember a former roommate of mine used to say he would never seek PEP there because he was unsure of the patients and also did not want people knowing that he might be HIV-positive, he then moved to another place for PEP when he had had a needle prick.”

4. HIV/AIDS course at college

The college provides a course on HIV/AIDS to all learners, however, the learners believe that the subject is treated in the same way as any other subject without regarding or treating it as being applicable to themselves as individuals, for their personal use.

“Even though we have HIV course here at college it is taught like any other subject without its importance being emphasised. As Health care learners we believe that a course on HIV/AIDS should be very applicable to us as learners. It should not just be like any other course that we do in order to pass. We are dealing with body fluids therefore we should be able to protect ourselves.”

The learners also reported dissatisfaction at the level at which the course is taught at college.

“In addition to HIV education, as nursing learners when we were first years we were not yet taught about HIV but we went for clinical practice where over 50% of the clients we serve are HIV positive and that puts us at risk. So I suggest that it be taught from first year level at the first semester as a course”.

They further suggested different ways that they think an HIV/AIDS course at the college could be implemented.

“I believe that at second year student should be taught theories and stuff but at third-year learners should conduct some research on HIV/AIDS in addition to their researches that they perform. These researches on HIV/AIDS should involve the rural areas so that each could be used as education to others in schools”.

“I think if they can be taught introduction to HIV even if it is not the course for evaluation but they need that basic education to reduce the risks of learners infecting themselves.”

5. Youth-targeted education

The learners also indicated that education provided to them should be youth-friendly. It appeared that they experienced the HIV education as not addressing or accommodating them.

“It is like this education targets mainly adults excluding the youth yet they more affected, therefore education should focus on youth.”

“Education can be done through things like dramas, things that the youth can be interested in.”

“Sometimes learners are not interested but if it information is provided in theatres maybe in the form of dramas that may interest learners.”

“I think that maybe learners are ignoring education on HIV/AIDS but maybe if presented in videos and they see the effects it has, they may acknowledge that the disease is a reality and it kills.”

HEAIDS (2010:3) indicated that learners had adequate knowledge regarding HIV and AIDS and also reported that learners were bored with AIDS education. It is therefore important that AIDS education also at times would include a different angle and a fresh approach in order to constantly capture the attention of the younger ones, the very ones that form the most endangered age group in any society. They need and deserve to be furnished with as many “tools” as possible that would in their daily way of living, encompassing all the *realities* of their “lived” world and surroundings *in practice*, enable them to protect themselves as far as possible. AVERT (2010) also shows that AIDS education can be constructed to involve quizzes, games and dramas, that would ensure learners’ involvement and at the same time would equip them with skills to negotiate safe sex. This is in line with the needs of the learners attending this HEI.

6. Sexuality Education

Some learners also suggested the need for sexuality education. They indicated that people can no longer be involved in a relationship without having sexual intercourse. According to the quoted remarks below it would appear that values and norms would certainly need to be attended to as well as sound perspectives on peer group pressure.

“Love is not sex, people should know what they say when they claim to love others”.

“In other words people should be taught about love, why do you get in a relationship, as currently it is like people get in relationships for sex.”

7. Regular sensitising campaigns

Learners have indicated the need to have HIV campaigns. These campaigns can serve a number purposes relating to the battle against HIV.

“I think as health care learners we are learning about HIV at different levels, Nursing learners at year 2, Pharmacy and MLS at year 3. So I think we should have the campaign like having the counsellors teaching everyone about HIV from year1 so that when they go to clinical practice they cannot harm themselves. They should be precautious about being infected. Some of us are being asked by patients about HIV and we know very little so I think

campaigns can help a lot in educating the learners.”

“Such campaigns can help to even find more ways of preventing the spread of HIV in our institutions as we are already left out in many HIV campaigns that are currently running.”

“...So I strongly believe that the campaigns may uplift our spirits in HIV prevention.”

8. Education on behaviour change

NAC (2007a:16) has included behaviour change and related communication as one of the strategies of preventing HIV infection. Motsoeli (2010:8) adds that the AIDS message hits the brick wall as sexually active adults refuse to embrace changes in behaviour. Motsoeli (2010:8) further indicated that despite the fact that people were aware that they put themselves at risk of contracting HIV, they were simply not prepared to give up their lifestyles of having more than one sexual partner at one time. Changing the practice of multiple and concurrent sexual partnerships is furthermore hampered by some traditional beliefs and customs (NAC, 2006:2). NAC (2007b:20) concurs and adds that for effective prevention of HIV infection members of society should modify their behaviour such as avoiding unprotected casual sex, having sex with multiple and concurrent partners, sex between young women and older men, starting sex at an early age, having sex with high risk partners, and promoting abstinence among youth. On the issue of behavioural changes the learners said:

“What I think is that most of these people here have information about HIV but they do not utilise the information they have. Condoms may be put everywhere but if they don’t want to use them it won’t help as you would find that many people get infected despite the fact that they know that condoms are freely available at nearby places.”

“What I would like to talk about is that it is true we may have education, quality education, but how can learners be influenced to practise their knowledge, for example if we say HIV can be prevented through abstinence let us see that being practised, let’s find ways to actually put our knowledge into practice.”

“I don’t know what needs to be done since unmarried people should not be having sex but they still do it anyway, so if sex without condoms could be prohibited, I don’t know how but it has to be explained that there will be no sex without condoms.”

9. Education on universal precautions

Learners also explained that they may be exposed to HIV while they are at the clinical areas and therefore stated a need for education on protecting themselves while in the clinical areas.

“I think the best way is to make some awareness using protective clothing because some learners may contract HIV due their carelessness at the clinical area so I think the best way is encourage proper use of protective clothing.”

“Another thing I can recommend to be there either on the course or programme is safety measures or precautions at work, e.g., how to use a syringe safely so as prevent pricking oneself with it after drawing blood, how to handle specimen, should check if he has some minor injuries on the hands so that he can use protective clothing or anything.”

HIV can be accidentally transmitted through contact with infected materials, such as might occur during occupational exposure (NAC, 2007a:27). Universal precautions for infection control are defined as the “the protection of health workers, home-based carers and other personnel likely to come into contact with HIV-infected blood or blood products” (NAC, 2007a:23). WHO (2004:29) further indicates that transmission from patients to health care workers is small, however, contaminated sharps can pose the risk of transmission of HIV to health care workers. Therefore sharps should be handled and disposed off carefully following the local guidelines (WHO, 2004:29). Universal precautions include the use of gloves, appropriate cleaning techniques when dealing with open wounds and blood spills and safe disposal of needles and medical waste (NAC, 2007a:27). WHO (2004:30) concurs and adds that mouth-to-mouth resuscitation should be avoided and laundry should be washed at high temperatures using appropriate chemicals. This therefore justifies the need for the learners to be educated on the use of protective clothing, specimen handling and disposing of used sharp instruments at the clinical area.

10 Life skills education

The learners have expressed the need for life-skills education as they have observed that some learners easily give in to peer pressure, while others cannot accept their family backgrounds and try risky behaviour in order to be at the same “level” with their friends.

“On the issue of ladies being involved in relationships with older men they need to be counselled so that they accept themselves by doing many things like the one that was conducted by Thapelo and others that still addressed ladies relating to relationships with older men. They should accept the economical status of their families.”

“I think the other thing is peer pressure, maybe different families, you find some of us their families are Christians, so when we are here at college we forget where we come from so we take college for granted and start going out for parties so you give in to peer pressure.”

Life skills training is the teaching of coping skills, such as self-esteem, assertiveness, decision-making capabilities and coping with depression, death and dealing with pressure, to mention but a few (SAfAIDS 2003:1). According to United Nations Lesotho (2009:27) life skills education is a new subject that should be taught consistently in schools for effective prevention and risk reduction of HIV/AIDS. MOET (2005:46-47) indicates that the primary goal of life skills is to change not only the learners’ level of understanding and knowledge but to enhance their ability to translate the knowledge into specific and positive behaviour. MOET (2005:47) further breaks down life skills education into three broad categories namely:

- Social skills that would include communication skills, negotiation / refusal skills, assertiveness skills, interpersonal skills and cooperation skills.
- Cognitive skills that would include decision making / problem-solving skills and critical thinking.
- Emotional coping skills covering stress management, managing feelings including anger and skills for increasing internal locus of control (self-management and self- monitoring).

11. Education addressing myths

Myths were raised as some of the factors driving the spread of HIV. The learners then indicated that education can address and reduce the spread of the myths.

“In most cases myths start off as jokes and only to find that people take them seriously, and I think with campaigns or anti-AIDS associations they can provide education”.

“And with peer education in our college that can reduce spread of this myths. Such associations can provide correct information that addresses the myths. At times some people may be able to ask questions hence clear the myths like one will be mad if he does not engage in sexual intercourse. Education can address peer pressure and myths among learners.”

Myths are said to provide description of beliefs and explanations that are contradictory to the facts about HIV transmission and prevention (BCM, 2007:321). Misconceptions about HIV/AIDS have been stated as one of the challenges that hamper prevention strategies in Lesotho (United Nations Lesotho, 2009:27). Therefore these myths also contribute to the spread of HIV infection and should be eliminated by supportive cultural attitudes and values (Jackson, 2002:136).

To address the myths the learners believed that they should correct people who are passing wrong information whenever they hear them.

“So whenever we hear anybody saying that we should correct that person. Even in class we have to make sure we really understand to avoid passing wrong information.”

12. Education on stress management

During the discussion, one student indicated that stress due to college work is one of the drivers of HIV as some learners believe that they can reduce stress by engaging in sexual intercourse. This was responded to in this way:

“May I ask is there any way we can have stress management rather than engaging in sexual intercourse? Because that one can also lead to spread of HIV. So can we use other means?”

“The way to address stress in this case is to manage our time, time management, that will help us focus on setting our priorities right. We can engage more on our courses with some recreational activities in between our school work.”

13. HIV education in High schools

One of the very rare categories was that of using learners in HEIs to address those in high schools who are yet to come to HEIs about HIV. They indicated that could help to prepare the prospective HEIs' learners.

“As learners in HEIs we could address other learners who are about to come to HEI about HIV and AIDS showing them that we understand HIV and therefore you too as you are preparing to go to HEI you should understand HIV, what it is and how it is transmitted, giving them information regarding the life they are about to live when they come to HEIs as that leads to problems as when they arrive in HEI they change their lives.”

14. Student involvement in caring for patients in the communities

It was also felt that if learners could be involved in caring for the ill HIV/AIDS patients in the communities, doing so could also help the learners to think twice before being involved in risky behaviour.

“I also think if learners could be involved in the communities looking after HIV/AIDS patients so that when one is to do something he can think twice before knowing that he will be like them.”

Category 2: HIV testing and counselling

The issue of testing was discussed at length and was found to be accompanied by fear of knowing the HIV-positive results. However, the learners expressed their need to have testing sites on campus so that they could undergo testing at any time they wished and also a need to make HIV testing compulsory at the college.

1. Know your status

“Secondly the college should negotiate with the hospitals so that every student must be tested before they can be admitted into college”

“I think there should be compulsory HIV testing and anybody found positive should not be admitted into the college.”

“I think we should have VCT every now and then. We should have something like that, we should know that this site is for testing and counselling so that we can go there and get tested.”

The importance of knowing one's status was also raised in that it helps to reduce unnecessary fears and allows one to seek assistance when exposed to occupational exposure.

HIV testing and counselling (HTC) is defined as an “HIV prevention intervention which gives the client an opportunity to confidentially explore his or her HIV risks and be assisted to learn his or her HIV test result” (MOHSW, 2004b:12). It is considered as an essential component of a comprehensive HIV/AIDS programme which also serves as an entry point for care and support services offered to infected persons (MOHSW, 2004b:12). It enables a person being tested and counselled to be prepared to make an informed decision whatever the results providing an opportunity to inform and educate those to be tested to understand the implications of the HIV test (NAC, 2007a:19). It also provides information on the choices people can make after testing (NAC, 2007a:19).

The need to have a testing site at college was also expressed by the learners who were given information and requested to participate in the quantitative phase of the study. They believed that they could be in a position to test better or on a regular basis if that site were to be available at campus rather than having to travel elsewhere to have a test performed.

2. Positive prevention

When people have been informed about positive HIV results they can act cautiously and without trying to spread the infection. Those informed as being themselves HIV positive would have been counselled to accept the status, because attempts to spread the disease will not serve the purpose of changing the status; on the contrary, it will increase the viral load and therefore shorten the lifespan.

“Yes that is absolutely necessary, that can help people who have tested positive to accept themselves and not feel like spreading the infection not even realising that they increase chances for them to have more viral load and reducing their life-span.”

According to Cichocki (2007) positive prevention is done to prevent superinfection or reinfection as a sequence of unprotected sexual encounters between two HIV-infected people. Safer sex should be practised with each and every sexual encounter (Cichocki, 2007). SAfAIDS ([sa]:9-10) indicates that positive prevention is important to HIV-infected persons because it prevents sexually transmitted infections, transmitting HIV to others and reinfection with HIV different strains which would lead to an increase in viral load, resistance to ARVs, and easier progression to AIDS.

Category 3: Anti-AIDS associations

The need for learners to join anti-AIDS associations or clubs was mentioned and the associations were even charged with the responsibilities that they could assume.

“I am talking about encouraging learners to join anti-AIDS associations, I think that could help.”

“Anti-AIDS associations or other associations could also provide education to others.”

“The AIDS associations that we talked about could also help in counselling.”

The anti-AIDS associations have been formed even in other institutions carrying out activities like raising HIV awareness on their campuses and providing peer education to other learners. Ochanda et al. [sa] state that in some universities, keen awareness of the pandemic has led learners to create Anti-AIDS associations to raise awareness further among the student population. The University of Nairobi, for example, has a very strong student association known as Medical Learners Against AIDS, which does not limit its activities to the campus alone; it has been invited by UNESCO to conduct peer education activities in secondary schools in some of the Kenyan provinces (Ochanda, [sa]). Kenyatta University has also formed a Learners Aids Control Organization to discourage risky sexual behaviour. (Ochanda, [sa]).

Category 4: Alcohol abuse

The use of alcohol was also said to contribute to the spread of HIV, and learners believed that the use of alcohol should be discouraged. They even suggested that introduction of a variety

of sporting activities could help learners with entertainment instead of them resorting to alcohol for recreational purposes.

“I think another thing the issue of drinking beer; you will find that 80-85% of accidents or illegal things that people do are because of beer. So people should be encouraged to stop drinking beer.”

“On the issue of alcohol, I think public drinking is not necessary.”

The alcohol and drug use has been found to contribute to the spread of HIV as people in their intoxicated and affected state tend to do things that they would not otherwise have done had they been sober or consciously aware. It is a known fact that the use of alcohol and drugs will certainly impair rational thinking and sound judgement. WHO and DFID (2004:5) indicate that substance abuse, including alcohol, can be the precursor to unprotected sex. NAC (2007a:9) state that high alcohol intake decreases the individuals’ judgement and therefore increases the likelihood for risky sexual behaviour which also includes sexual violence. IIEP (2008:43) adds that in a drunken state most alcohol abusers are not likely to use condoms and therefore put themselves or others at an increased risk of HIV infection. United Nations Lesotho (2009:15) further shows that there is consistent association between alcohol use and sexual risk taking.

Category 5: HIV/AIDS policy for learners

The need for an HIV/AIDS policy for learners was also mentioned.

“College should have a policy for addressing HIV/AIDS issues”

According to AMDC ([sa]:3) the development of a workplace policy is the single most effective and important action that can be taken against HIV. The researcher adopts the same point of view and is of the opinion that it applies to HEIs as well. The development of HIV/AIDS institutional policies can be the most effective action taken against HIV. HIV/AIDS policies/programmes can help to promote prevention as the key strategy in the battle against HIV/AIDS. At the same time such policies and programmes will enhance

protection of human rights, and support and care for the affected and infected individuals at institutional level.

Among the HEIs in Lesotho, National University of Lesotho (NUL) is the only institution that has an HIV/AIDS policy (NAC, 2009b:8). On the other hand a number of universities in Africa, mostly in Namibia, Nigeria, South Africa, Tanzania and Uganda had institutional policies in place years ago (WGHE, 2006:7). In addition the evolution of HIV/AIDS policies in South African universities has been haphazard with a few that started as far back as 1993 (University of Cape Town) and others that started afterwards (Williamson, 2002:55-57).

Category 6: Sporting activities

The sporting activities were mentioned to be one aspect that needs to be improved as currently only soccer is being catered for.

“Sporting activities should be improved for instance we don’t have facilities for in-door games like darts, snooker, table tennis, golf. It is only soccer”

“We don’t have many recreational activities, in most cases one is resting in his room therefore that leads to learners of opposite sex to visit one another so that in itself increases the chances of having sex hence spread of HIV. So if we were busy and I know that during the weekend I have a match I will have to preserve energy that may reduce the spread because we are not using the knowledge that we have”

Even though my colleague feels he does not know what could be done about alcohol, I think there should be sports, variety of games here at college, as you will find that the main sporting activity here is soccer, we need sport like cricket, so that people can participate in variety of sports as other people may not be interested in soccer or volley ball. We really need cricket so that people who know it can also have a sport to play.”

Sport-related activities have also been shown to play a beneficial role to people living with HIV as the exercises strengthen the immune system and even delay the onset of AIDS (Health 24, 2009). Anon [sa] adds that sports and physical education play an effective role in

the fight against HIV/AIDS by providing safe and informal spaces for the young people to discuss HIV/AIDS and to learn about the steps they can take to protect themselves.

Category 7: World AIDS day at HEIs

The issue of celebrating World AIDS Day at HEIs was raised and it was believed that such celebrations serve as reminders to the existence of the disease.

“I would like to know is there anything like World AIDS Day?”

“But here at our institution we have never celebrated such a day, such things are the reminders, reminding people about the existence of HIV. Maybe if such a day could be celebrated, maybe including all HEIs in Lesotho together.”

Category 8: Church attendance

It was also believed that if people could attend church, it could also help as people would be reminded of the beliefs of the church concerning sexual activities.

“Another thing that I think can help are things like church attendance, clubs within the church, if we could attend such things that could remind ourselves of who we are, what the church says relating to sexual activities.”

Theme 2: Care

The theme of care could be classified in three categories, the main one being HIV Testing and Counselling. This category in itself presented with five sub-categories. SAfAIDS (2008:11) describe caring for HIV-positive people to be composed of giving love and support, refusing to discriminate against them based on their HIV status and advocating for their rights within one's community.

Category 1: HIV Testing and Counselling

The learners expressed the need for the college to have HIV testing as a requirement before one could be admitted into college. This testing should be accompanied by counselling to help the HIV-infected people to be able to accept their status.

“What I think is add more on HIV status so that everyone knows the status since we are the health professionals we know the consequences of HIV so that when someone has tested positive we can minimise the effects.”

Support

The learners said they needed to be educated on how to behave around someone who was HIV positive without making the person feel bad.

“Education on behaviour around HIV-positive people, like one may think that sharing food, cell phones and other things may put him at risk”

Counselling services

The learners expressed the need for counselling and indicated that it could help HIV-positive learners to accept their status and live healthier for a longer time.

“I think when they have tested positive they can be counselled and I believe it can help them to accept the status and help them think more before engaging in risky behaviour but without counselling one may think of spreading it purposely, I also have infection and am also trying to keep the infection as a secret for fear of rejection by friends.”

“Yes that is absolutely necessary, it can help people who have tested with positive results to accept themselves and not feel like spreading the infection not even realising that they increase chances for them to have more viral load and reducing their life-span.” (That and it refer to counselling services).

Stigma reduction

Stigma and denial have been identified as some of the drivers of HIV/AIDS as people are afraid of testing for fear of rejection. The learners have also identified stigma as one of the things that need to be addressed so that they can care for one another.

“This means that we should address stigma because people who are living with HIV and AIDS, ... so it could be better if we could have people who are in power and living with HIV to address us so that learners who are HIV-positive can accept themselves and their statuses. That can also help prevent other people from bad-mouthing them knowing how other people who are living with HIV are. That would encourage people to go for testing knowing that they will not be discriminated against.”

“Eradicating stigmatisation will even help us to undergo testing so that we can know our statuses.

BCM (2007:6) states that stigma associated to HIV/AIDS is often brought about by the people who limit their analysis of the transmission of HIV to factors like sexual promiscuity and drug use. Stigma and fear are often fuelled by ignorance (BCM, 2007:6). Denial about HIV can have an effect on stigmatising HIV/AIDS and creating an environment conducive to continued spread of the virus (BCM, 2007:6). It is found that many people fear to raise an issue of condom use before sex because they fear that their partner might interpret that as an indication of possible HIV infection (BCM, 2007:6).

Treatment adherence

The learners have alluded to the adherence to treatment and indicated they needed support from their colleagues who were found to be HIV positive and needed treatment. They also indicated that there were some myths related to ARVs that need to be addressed for effective treatment.

“If we can know people who are HIV-positive we can re-enforce to see that they take

treatment. Support them to adhere to treatment to prevent resistance.”

“Also I think if we could discourage these myths about ARVs, like some people react to them and some people are hesitant to start having them. It should be emphasised that the use of ARVs can help someone.”

HTC is considered as an essential component of a comprehensive HIV/AIDS programme which also serves as an entry point for care and support services offered to infected persons (MOHSW, 2004b:12). This means that a person cannot start HIV treatment unless he/she has tested and was found to be HIV positive.

Positive prevention

Positive prevention was mentioned under HIV prevention but it also featured under care because positive prevention prevents transmission of HIV to non-infected individuals, at the same it also protects the HIV-positive individual from re-infection which accelerates the progression of HIV to AIDS (SAfAIDS [sa]:9-10). The same author further states that preventing re-infection with HIV is key to a longer, healthier and happier life.

“...and not feel like spreading the infection not even realising that they increase chances for them to have more viral load and reducing their life-span.”

“I believe that can help them to accept the status and help them think more before engaging in risky behaviour but without counselling one may think of spreading it purposely.”

Counselling services at college

The learners informed the researcher that currently there were no counselling services at college and they believed that if the college could provide HTC and in addition have counselling services on campus on full-time basis that would be beneficial. This is evidenced by a number of times that counselling was mentioned during the discussion and it was also linked to Anti-AIDS associations, then the answer to the question “Do you think you need counselling office functioning in college on full-time basis?” was:

“Yes that is absolutely necessary, that can help people who have tested to accept themselves and not...”

“Counselling should be there...”

Peer counselling

The learners also indicated the need for learners to counsel other learners.

“Anti-aids associations, learners should be involved in counselling others”

“The Aids associations that we talked about could also help in counselling.”

Provision of adequate nutrition

Nutrition was mentioned as one of the requirements for caring for HIV-positive people. They said that nutrition was important and they had heard that people needed proper nutrition with fruit all the time and those learners might not be able to afford such meals and therefore said if the college could assist in providing adequate meals for HIV-positive learners it might be of great help.

“College should provide adequate nutrition for HIV-positive, their meals should always have some fruits as it is encouraged.”

Category 3: Clinical pharmacology course

The issue of clinical pharmacology being taught to learners was triggered by the fact that some people said that there were myths saying that people react to ARVs. The answer to that was the introduction to the course of clinical pharmacology.

“I think clinical pharmacology can assist in addressing that. Clinical Pharmacology as a course should be done in the course especially relating to HIV and AIDS. I am saying clinical pharmacology could be helpful if we could be taught that side-effects or reactions that could be present due to ARVs are not major to cause any harm like people who have been taking

ARVs, reactions that are present are such that if one finds that the reaction is a bit unbearable there are antidotes that are to help to reduce reaction and the treatment for PEP can also be changed.”

4.3 Triangulation of the quantitative and the qualitative phase of the study.

During the two phases of the study, there were those aspects that were found to be similar while others were not related. The quantitative data were collected by using the questionnaires whereas the qualitative data were collected from the focus group discussions.

The following aspects were found to be similar

Overall knowledge of the participants was found to be similar from the focus group discussions and the questionnaires. The overall knowledge was found to be about 92.7% from the questionnaires. In the focus group discussions the overall knowledge was gathered from the needs of the learners. The participants in the focus groups had indicated various activities that they believed could help address HIV/AIDS issues in their college and the examples are: the need for behaviour change, education as the main instrument, improvement of sporting activities which they believed could reduce alcohol use, counselling services and testing sites. All these show that the participants had knowledge concerning HIV/AIDS transmission, prevention, drivers of the spread and treatment.

They indicated the need for consistent condom use for every sexual contact to be important irrespective of how long one has been in the relationship unless they have tested together. From the questionnaire 100% of the participants answered true to the statement “people can protect themselves from HIV by using a condom correctly every time they have sex”.

During the focus group discussions the participants indicated the need for education to address the following: modes of transmission, use of universal precautions, myths, stigmatisation, importance of testing and treatment. It is evident from the quantitative phase that some aspects of transmission are still not very clear to some learners as 27.8% did not know that oral sex can transmit HIV, 10.1% did not know about transmission of HIV from mother to child during breastfeeding hence the need to address transmission of HIV from one person to another.

The issue of life skills was mentioned during the discussions and even during the phase 1 of the study, 98.1% of the participants were aware of the preventive role played by life skills education in the prevention of HIV.

The fact that 4.7% of the participants still believe that the relationship with the friend should stop immediately if the friend has been diagnosed HIV positive tallies with the emphasis that the participants in phase 2 of the study had on education addressing stigmatisation.

The participants who answered “don’t know” and “false” to the statement once one has started taking ARV treatment for HIV, one has to take it for life constituted 11.9% of all the participants, and this relates well with the need for support of those who are found to be HIV-positive and needing to start treatment to be supported to adhere to treatment and also on the need for education on the use of ARVs.

The issue of HTC in phase 1 of the study was not related to the number of times it came up during phase 2 of the study. The need to have testing sites was even mentioned during the briefing of the learners about the study when the learners were asked to participate in phase 1 of the study, some of them had asked the researcher as to why there were no such facilities as testing sites at the college. To find 11.3% of the learners not answering true to the statement “HIV testing and counselling is one of the strategies used in the prevention of HIV/AIDS” does not correlate with the expectations of the researcher based on the number of times it was raised in the focus group discussions and during the talks with the learners during the briefings.

4.4 Chapter Summary

The overall knowledge of the participants regarding HIV prevention and care is high at average of 92.7% with the exception of the following questions which were answered correctly by less than 90% of the participants: HIV testing and counselling is one of the strategies used in the prevention of HIV/AIDS, once one has started taking ARV treatment for HIV, one has to take it for life, patients with TB also have HIV, HIV can be transmitted from mother to child through breastfeeding, a person can get HIV from oral sex and there are people who are HIV-positive in your institution. Despite the fact that the knowledge levels could be considered to be high, the researcher is of the opinion that some areas still need to

be emphasised especially considering the fact that these learners are in a Health Sciences college. The following questions were answered correctly by 100% of the participants: there are people who are HIV-positive in Lesotho, having sex with more than one partner can increase a person's chance of being infected with HIV/AIDS, people can protect themselves from HIV by using a condom correctly every time they have sex and a person who is HIV-positive needs to be loved and supported. The fact that knowledge among the participants is high is further supported by NAC (2006:2) who states that knowledge levels are high in Lesotho due to the ongoing public education and exemplary commitment of National leadership to HIV awareness. Machobane and associates (2008:1) also conducted training needs assessment in Lesotho and found that the majority of respondents had basic knowledge on what HIV/AIDS was and on how it was transmitted. HEAIDS (2010:3) concurs with the previous authors regarding HIV/AIDS knowledge, stating that knowledge of HIV/AIDS transmission among learners is adequate except for the vertical transmission and the availability of post-exposure prophylaxis in the case of rape (HEAIDS, 2010:39).

In this study the areas where learners seemed to have problems or uncertainties were transmission from mother to child, transmission through oral sex, treatment, HTC as a strategy for HIV prevention and the HIV/TB co-infection. For the questions where less than 90% of the participants had answered correctly and were analysed according to the programmes nursing assistant was the leading programme, followed by medical laboratory sciences and general nursing was the lowest performing programme. When analysing the results according to the year of study there was no clear pattern that could be followed, in some cases year 3 participants would lead and that could be associated to the fact that they might have been introduced to an HIV/AIDS course while others may not have been, but that was not consistent with regard to all the questions.

The needs of the learners are summarised as follows: adequate education addressing behaviour change, myths, stigma, transmission of the HIV, universal precautions, condom use, abstinence, proper use of PEP and microbicides. The learners further indicated the need for youth-related education, peer education and life skills education. The need for improved sporting activities was also raised and it was believed that sports could help reduce alcoholism. HTC services were also among the needs of the learners. The learners also need an HIV/AIDS course offered at college to be such that it is applicable to them. The need for an HIV/AIDS policy for learners, adequate nutrition, clinical pharmacology, church

attendance and student involvement in caring for HIV/AIDS patients and in educating learners in high schools were also mentioned.

CHAPTER 5

RECOMMENDATIONS, LIMITATIONS AND CONCLUSION

5.1 Introduction

The previous chapter dealt with the findings derived from the results of the research. This chapter will focus on the recommendations for the development of the HIV/AIDS programme for learners in a specific HEI in Lesotho. Limitations of this research and the conclusion will form part of this chapter.

5.2 Recommendations

The recommendations for the development of the HIV/AIDS programme for learners in a specific HEI in Lesotho was done based on the *knowledge levels* of the learners that could be determined by means of quantitative research that employed a questionnaire (phase 1 of the study) and based on the results of the qualitative phase of the study that was conducted by means of group discussions to investigate the *needs* of the learners. The data collected during these two phases could be analysed in order to identify findings and draw conclusions. Both the findings and conclusions assisted in formulating relevant recommendations. Apart from the actual research done with participants at the specific site of focus the relevant information gained from the literature review was also taken into consideration, e.g. procedures at other HEIs in other countries. The information accumulated by means of these ways of gathering data (both theoretically and in practice) placed the researcher in a better position to judge what should be done in order to address HIV/AIDS issues for the learners at the HEI effectively.

It is the researcher's intention to make the recommendations available to the college management for scrutiny and implementation as soon as all the necessary procedures concerning the study have been finalised.

5.2.1 HIV/AIDS programme for learners

There are various reasons that necessitate the institutions to have HIV/AIDS programmes. UNAIDS (2006:17) for instance indicates that HIV/AIDS affects mainly people in the age group 15-24 years, and most learners in HEIs are in the age group 20-24 years. In this specific HEI about 56% of the learners are in the age 20-24 years based on the information from the student records and about 60% of the year 1 learners are between 20-24 years of age. In addition WGHE (2006:27) states that HIV/AIDS does not respect institutions and these tertiary institutions have large numbers of young people in the age bracket 19 - 25 years who engage in risky sexual behaviour and would therefore be particularly vulnerable. This means that the majority of the learners are in the most affected group. Van Wyk and Pieterse (2006:2) further state that universities should provide intellectual leadership to challenge assumptions about the epidemic, society, sexuality and identity and to create new understanding of HIV/AIDS in the context in which it is developing. Even though this was directed to universities this does not mean other HEIs are excluded. The same author further shows that universities need to have institutionalised HIV/AIDS programmes because HIV/AIDS alters the core function and rationale of any university.

The role of an HIV/AIDS programme in the tertiary education is to provide the voice to influence policy and to educate the wider community (Van Wyk and Pieterse, 2006:3). The HIV/AIDS programme requires leadership of the HEI for effective response of HIV/AIDS in the HEI to ensure commitment to change, mobilisation of resources and overcoming of the barriers (Van Wyk and Pieterse, 2006:3). It is therefore recommended that this Institution should have an HIV/AIDS programme for learners.

5.2.2 HIV/AIDS policy for the learners

During the focus group discussions the learners clearly expressed the need to have an HIV/AIDS policy for learners in the institution. It is therefore recommended that the college management should ensure that an HIV/AIDS policy for learners is developed. The HIV/AIDS policy for the HEI should be in line with the country and the regional policies and guidelines. The policy should have the following as key components: rights and responsibilities of the learners affected by HIV/AIDS; integration of HIV/AIDS into

teaching, research and service activities of the institution; provision of preventive, care and support services on campus; and implementation of the policy: structures, procedures, monitoring and review. Such a policy should clearly indicate the institution's convictions and commitments and should clearly state the action to be taken against anybody who displays discriminating behaviour with regard to HIV-positive individuals within the institution's jurisdiction.

5.2.3 HIV/AIDS education

It has been observed that nursing learners go to the clinical practice before they have been exposed to an HIV/AIDS course at the college. Therefore there have been concerns from the clinical staff that learners may not be aware of the risks that they may encounter in practice and neither has their awareness been alerted to the precautions they have to take in order to protect themselves adequately. These facts came to the researcher's attention. Therefore the following are suggested: all learners should be given an orientation course on HIV/AIDS on first entering college. Before any group of learners go for their clinical practice they should be given some lectures on the state of affairs in the practice on how to protect themselves as well as the patients from HIV/AIDS. Some learners with experience could be trained on HIV/AIDS to be the peer educators at college. Such student educators could be provided with an encompassing set of relevant guidelines in order for them to include the facts of importance. The college can also collaborate with other institutions and organise student debates on HIV/AIDS. That can help to create the environment for learners to discuss HIV/AIDS issues with others. The learners can also be involved in educating the community around the college and the nearby schools. These activities can help to reinforce HIV/AIDS education for the learners. The learners can also be supported to perform in dramas about HIV/AIDS and be provided with the videos and reading materials to make the education to be youth friendly and avoid boredom. The HIV/AIDS course that is being done at college should in addition to the scientific nature of the disease it covers also cover the social and economic impact it has on lives of individuals to make it more relevant to the learners. The education provided at college should address the following: myths, stigma and discrimination, sex and reproductive health, HIV transmission, prevention strategies, treatment, positive prevention and behaviour change. The results of the study indicate that learners have more than basic

knowledge regarding HIV/AIDS, however, this does not imply that they should not be provided with information on a continuous basis.

5.2.4 Life skills education

One of the problems raised by the learners during the focus group discussion was peer pressure. Female learners were also said to be involved in intergenerational sex for money and because they cannot accept their family backgrounds, they want to be associated with rich backgrounds. The life skills education can help the learners to accept themselves as they are, to withstand peer pressure, as well as add skills and strategies for negotiation and refusal. Life skills education can also address stress management and leadership skills. Therefore life skills education is recommended to be done at least twice in an academic year, during the orientation period and at the beginning of the second semester.

5.2.5 Improvement of the sporting and recreational facilities

The participants in the focus group discussions mentioned that the only sport at college was soccer. Women very rarely play soccer and quite a number of enrollees at college are female. Apart from that not all males are necessarily interested in playing soccer. It is therefore recommended that the sporting facilities be improved and other types of sports be introduced, e.g. table tennis, snooker, cricket and others. The different types of sports will allow learners to participate in sporting activities and reduce idling and boredom which were also said to contribute to the use of sex as a form of entertainment. There should be sports days at college in addition to the currently available inter-college sports. During a sports day at college, the college with assistance of the team leaders should encourage as many learners as possible to participate or to be an enthusiastic part of the spectators. The intention of the sports should not only be to win but to encourage learners' collaboration and reinforce their feelings of belonging.

5.2.6 Availability of condoms

The participants in the quantitative phase of the study have indicated that they are aware that condoms can prevent HIV infection when used correctly every time people have sex. Even in the qualitative phase the same view was shared. This therefore necessitates the college to resuscitate the practice of distributing condoms to the learners through the SRC or the student volunteers who would be responsible for ensuring that all the selected sites for free condoms are always refilled. The nearby shop could also be encouraged to stock different brands of condoms for those learners who may not like those that are supplied.

5.2.7 Establishment of Anti-AIDS associations for learners

The Anti-AIDS associations for learners can be an important tool for student education, peer counselling, raising awareness and conducting campaigns. They can be responsible for many Anti-AIDS activities that could take place in the college. They can create a relaxed environment for the learners to discuss HIV/AIDS issues without fear of discrimination or adult interference. They can arrange visits with other colleges for discussions, debates and various competitions. These associations can arrange for the best way to celebrate World AIDS day for the learners. The Anti-AIDS associations can work together with other learners to find out how best they can support the affected and infected learners to reduce stigma and for impact mitigation. The college management can work with the associations to seek funding where necessary and to monitor their activities.

5.2.8 HTC services

The college should negotiate with the centres that provide HTC services like New Start who could be willing to come to the institution and organise a testing week twice a year. This service is usually done at no charge. The college could also seek services for a counsellor who could visit college as per agreement. Ideally it is recommended that the college should in its tight budget consider having a full-time HIV/AIDS office with the counsellor who would be in charge of counselling learners on matters related to HIV/AIDS. That professional counsellor can also educate members of the anti-AIDS associations in peer counselling. The

HIV/AIDS office should also have a nurse and a visiting doctor for provision of treatment for opportunistic infections and ARVs. That office can also serve the staff as well. The presence of such an office could reduce absenteeism where one is to collect treatment from a clinic in town and therefore has to queue with other patients.

5.3 LIMITATIONS

The following limitations were observed by the researcher:

The fact that data were collected from the learners only and not from the college management as well, limited the researcher's information, for example, when learners said they did not have a variety of sports-related facilities the researcher depended on what they had said only without establishing whether management already had something to address that problem in the pipeline. This would lead the researcher to venture recommendations on the information provided by the student participants.

The fact that this study was carried out in the health sciences HEI and not any other HEI that could have an influence in the knowledge levels of the learners as they come across HIV/AIDS content in various subjects not only in HIV/AIDS course as it may happen in other HEIs that are not of health sciences nature. This can affect the generalisation of the results to other HEIs. It is therefore recommended that other studies be carried out in other HEIs in Lesotho before generalising.

The fact that the researcher also happens to be a lecturer at the HEI under study and has taught most of the learners attending the college, may have had an impact on the participation of the learners and the way they responded. Some learners may have participated in the study even if they did not want for fear of victimisation or because it was their lecturer who was talking to them despite the fact that the researcher had informed them that participation is voluntary and they would not get any rewards or penalties for the choice they made. The student-lecturer relationship between the researcher and the learners could have the same effect as the doctor-patient relationship where the doctor is the researcher and patients simply participate due to the therapeutic misconception about their doctor. Therefore that can have an impact on the right to self-determination on the learners.

5.4 CONCLUSION

HIV/AIDS mainly affects young people globally and regionally, with the age group 15-24 being mostly affected (UNAIDS 2006:17), notably the age group of most learners in HEIs and yet minimal attention regarding HIV/AIDS interventions is paid to HEIs in Lesotho. The researcher therefore conducted a study focusing in a HEI in Lesotho. The objectives of the study were to determine the knowledge of learners in a specific HEI in Lesotho regarding HIV/AIDS prevention and care and to explore the needs of the learners in a specific HEI in Lesotho regarding HIV/AIDS prevention and care. The research questions were directed at establishing the levels of knowledge that learners in a specific Higher Education Institution in Lesotho have regarding HIV/AIDS prevention and care, and at gathering insight into the needs of learners in a specific Higher Education Institution in Lesotho regarding HIV/AIDS prevention and care.

The findings of the study have shown that learners in a specific HEI in Lesotho had adequate knowledge regarding HIV/AIDS prevention and care and on average 97.2% of participants had answered all questions correctly. The needs of the learners were explored using the focus group discussions and their main need was education addressing HIV transmission, myths, stigma and behaviour change. Several other needs regarding HIV/AIDS prevention and care were also identified. In conclusion the findings from both phase 1 and phase 2 of the study have shown that there is adequate knowledge among the student population, but what still remains a challenge is the necessary insight and skills for implementation that would include changes in attitude and behaviour.

The research questions have been answered and the objectives of the study have been achieved and hence the researcher has proposed these recommendations based on the findings to establish the HIV/AIDS prevention and care programme for learners at the HEI.

References

Allen, R. E., 1990. The concise Oxford Dictionary of current English. Oxford. Clarenton. 1454p.

ANON. {Sa}. Tackling HIV/AIDS and other Communicable Diseases through sport. http://www.sportsanddev.org/learnmore/sport_and_health/tackling_hiv_aids_and_other_communicable_diseases_through_sport/mht [Date of access 04.08.2010]

Apprentice Management Development Consultants (AMDC) {Sa}. **The HIV/AIDS and the world of work.** Nelspruit South Africa 24p

AVERT. 2010. **AIDS Charity Avert.** <http://www.avert.org/aidsafrica.htm>. [Date of access 04.06.2010]

AVERT. 2010. AIDS Education and young people. <http://www.avert.org/AIDSEducation&youngpeople.mht>. [Date of access 13.07.2010]

BCM, 2007. **HIV curriculum for the Health Professional.** Texas. 354p

Bergman, M. M. 2008. **Introduction: Whither Mixed Methods in *Advances in Mixed Methods Research*.** SAGE publications: London 1-7p

Brink, H. 2008. **Fundamentals of Research Methodologies for Health-care Professionals.** 2nd edition. Juda and co. Cape-Town 226p.

Burns, N. and Grove, S.K. 1997. **The Practice of Nursing Research- Conduct, Critique, & Utilization.** 3rd Edition. Philadelphia. W.B. Saunders company. 828p

Cichocki M. 2007. Positive prevention. <http://aids.about.com/cs/safersex/a/reinfection.htm> [Date of access 04.08.2010]

CRS. 2006. **The MOVE Pilot: Phase 1.** Maseru. CRS

Creswell, W. and Clark, V.L. 2007 **Designing and Conducting Mixed Method Research**. California Sage publications Inc. 274p.

Creswell, J.W. 2009. **Research design: Qualitative, Quantitative, and Mixed Methods Approaches**. California. Sage publications Inc. 260p.

Couchman, W. and Dawson, J. 1995. **Nursing and Health-care Research – a practical guide**. 2nd Edition. London . Baillière Tindall. 192p.

Cronje, A. 2005. **Research Methodology (RNN 4110)**. Nelson Mandela Metropolitan University 59p. (Study guide)

De Vos, A.S. 2005. **Qualitative data analysis and interpretation in De Vos A.S. et al. 3rd edition Research at grassroots for social sciences and human service professions**. Pretoria. Van Schaik: 333-349

Du Plooy, G.M. 2001. **Communication Research – Techniques, Methods and Applications**. Lansdowne. Juta & Co. Ltd. 379p

ELRC. 2005. **Health of our Educators: A focus on HIV/AIDS in South African public schools 2004/5 survey**. HSRC press Cape Town. 175p. <http://www.sahara.org.za> [Date of access 15/12/2009].

GOL and UNAIDS. 2004. **Turning Crisis into an Opportunity – Strategies for scaling up the National Response to the HIV/AIDS Pandemic in Lesotho**. New Rochelle. Third Press Publishers. 300p.

Greeff, M. 2005. **Information collection: Interviewing**, in *De Vos A.S. et al. 3rd edition Research at grassroots for social sciences and human service professions* . Pretoria. Van Schaik: 286-313

HEAIDS, 2010. **HIV Prevalence and Related Factors – Higher Education Sector Study, South Africa, 2008-2009**. Pretoria: Higher Education South Africa. http://www.irinnews.org/pdf/pn/HIV_Prevalence.pdf [Date of access 07.06.2010].

Health 24. 2009. **HIV and Sport**. http://www.health24.com/medical/Condition_centres/ppt
[Date of access 04.08.2010]

International Institute for Educational Planning. 2008. **The impact of HIV and AIDS on Higher Education Institutions in Uganda**. <http://www.unesco.org/iiep>. [Date of access 10/02/2009]

Jackson, H. 2002. **AIDS Africa: Continent in Crisis**. Harare. SFAIDS. 440p.

Kashaga, F.K. and Leticia, B.F. 2002. **The Role of Higher learning institutions in the fight against HIV/AIDS**. 7-12 July. Dar es Salaam Tanzania.

Khumalo, G. 2008. **Universities work to prevent HIV, AIDS among learners** <http://www.unesco.org/science/edito-en17shtml>. [Date of access 09/02/2009]

LESOTHO. 2004. **Higher Education Act, No. 1 of 2004**. Maseru Government Printing.

LoBiondo-Wood, G. and Haber, J. 2006. **Nursing Research – Methods and Critical Appraisal for Evidence-Based Practice**. 6th edition. St Louis Missouri. Mosby Elsevier. 602p

Machobane and Associates. 2008. **HIV and AIDS Training Manual: Private Sector and Civil Society Organizations Basic Facts, Programming and Peer Education**. Maseru. NAC. 129p.

McBurney, D.H. 2001. **Research Methods**. Stamford. Wadsworth. 450p.

MoET. 2005. **HIV/AIDS, Gender and Life skills Manual for Training of Teachers**. Morija. Morija Printing Works. 91p.

MoFDP 2004. **Lesotho Vision 2020**. Morija. Morija Printing works. 68p.

MOHSW 2003. **Health and Social Welfare Policy**. Maseru. MOHSW- Health Education. 39p.

MOHSW. 2004b. **HIV Testing and Counselling (HTC) Training Course – Trainees Manual**. Maseru. MOHSW. 125p.

MOHSW. 2006. **HIV Testing and Counselling Policy for the Kingdom of Lesotho**. Maseru. MOHSW. 28p.

Motsoeli, N. 2010. **AIDS message hits brick wall**. *Lesotho times*:8 April 8-14

NAC. 2006. **HIV and AIDS in Lesotho – A Summary of HIV and AIDS**. Maseru. NAC. 5p.

NAC. 2007a. **National HIV and AIDS Policy**. Maseru. NAC. 60p.

NAC. 2007b. **National HIV & AIDS Strategic Plan (2006-2011)**. Maseru. NAC. 84p.

NAC 2008. **Report for HIV/AIDS Quarterly Partnerships Forum- Reporting period July-september 2008** Maseru. NAC 141p.

NAC et al. 2008. **Lesotho UNGASS country report – January 2006 to December 2007**. (sl) 82p.

NAC. 2009. **NUL Launches HIV and AIDS Policy**. *Quarterly newspaper*:8, July-September 2009.

Nkhumane, E. 2008. **Couple empowerment strategies to decrease the HIV Risk in a Male-Dominant Milieu**. Potchefstroom: North West University. (Dissertation- MCur.) 202p.

Ochanda A., Njima R. and Schneegans S. {Sa} **World of Science**. <http://www.unesco.org/science/edito-en17.shtml>. [Date of access 09/02/2009]

Parahoo, K. 2006. **Nursing Research- Principles, Process and Issues**. 2nd Edition. New York. Palgrave Macmillan. 481p.

Polit, D.F., Beck, C.T. and Hungler, B.P. 2001. **Essentials of Nursing Research- Methods, Appraisal, and Utilization**. 5th Edition. Philadelphia. Lippincott. 524p.

Polit, D.F. and Beck, C.T. 2008. **Nursing Research- Generating and Assessing evidence for Nursing practice** 8th Edition. Philadelphia. Lippincott. 796p.

Polit, D.F. and Hungler, B.P. 1997. **Essentials of Nursing Research- Methods, Appraisal, and Utilization**. 4th Edition. Philadelphia. Lippincott. 530p.

Rossouw, D. 2003. **Intellectual tools, Skills for the human sciences**. 2nd edition Pretoria: Van Schaik publishers.

SADC. 2007. **A Report of the SADC Regional Consultation on HIV and AIDS Research Agenda 28-30 August 2007**. Gaborone. 27p.

SAfAIDS. 2008. **HIV and AIDS: How can I make a difference! Part (III)**. Harare. SAfAIDS. 28p.

SAfAIDS. {Sa} **“Positive Prevention”, Prevention for people living with HIV**. SAfAIDS. Pretoria. 40p.

Senefield S. 2008. **Lesotho MOVE Evaluation**. Baltimore. Catholic Relief Services. 62p.

Stellenbosch University; Office for Institutional HIV Co-ordination. 2009. HIV and AIDS Policy for learners. <http://www.sun.ac.za/hiv>. [Date of access: 25/02/2010]

Strydom, H. 2005. **Sampling and sampling methods** in *De Vos A.S. et al. 3rd edition Research at grassroots for social sciences and human service professions* . Pretoria. Van Schaik: 192-204

Thahane, T. T. 2009. **Budget Speech to Parliament for the 2009/2010 Fiscal Year**. Maseru 27p.

UNAIDS. 2006. **A Faith-based Response to HIV in Southern Africa: The Choose to care Initiative**. Geneva. UNAIDS.

UNAIDS 2008. **Report on the global AIDS epidemic**. Geneva. UNAIDS. 357p

UNAIDS. 2010. **UNAIDS OUTLOOK REPORT**. <http://www.unaidsupdates.pdf>. [Date of access 04.06.2010].

UNAIDS and WHO. 2009. **AIDS epidemic updates**. <http://www.unaids2009updates.pdf>. [Date of access 04.06.2010].

UNFPA. {Sa}. **Young People preventing HIV/AIDS**. <http://www.youth.mht>. [Date of access 29.04.2010].

United Nations. 2001. **Declaration of Commitment on HIV/AIDS – UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS 25-27 JUNE 2001**. UNAIDS. Geneva. 47p.

United Nations Lesotho. 2009. **The Joint United Nations Programme of support on AIDS in Lesotho 2009-2012**. {sl} 64p.

Van Wyk, B. and Pieterse, J. 2006. **Institutional responses to HIV/AIDS from Institutions of Higher Education in the SADC- A report commissioned by Southern African Regional Universities Association**. http://www.sarua.org/files/publications/SARUA_HEI_HIV_AIDS_study.pdf [Date of access 10.08.2010]. 66p.

WGHE. 2006. **Higher Education Institutions in Africa Responding to HIV/AIDS**. <http://www.aau.org>. [Date of access 29.01.2009].

WHO. 2004. **TB/HIV A Clinical Manual**. 2nd Edition. WHO. Geneva. 210p.

WHO and DFID. 2004. **HIV/AIDS Prevention and care among Especially Vulnerable Young People. A Framework for Action**. London. 28p.

WHO – SEARO 2008. **HIV/AIDS prevention, care and treatment in the South- East Asia Region – Report of the 19th meeting of the National AIDS Programm Managers Bali, Indonesia, 29-31 October 2007**. 38p.

Williamson, L. 2002. **Effective AIDS Management Strategy into Action**. *Perspective – African Journal on HIV/AIDS*. 112p.

Appendix 1



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvennoot • your knowledge partner

07 June 2010

MAILED

Mrs M Mphana
Department of Nursing
2nd Floor, Teaching Block
Tygerberg Campus

Dear Mrs Mphana

HIV/AIDS Prevention and Care for Learners in a Higher Education Institution in Lesotho

ETHICS REFERENCE NO: N10/05/147

RE : APPROVAL WITH STIPULATIONS

It is a pleasure to inform you that a review panel of the Health Research Ethics Committee has approved the above-mentioned project with a STIPULATION on 7 June 2010, including the ethical aspects involved, for a period of one year from this date.

1. The consent form for the qualitative component MUST contain a statement reassuring participants that they will not be asked to reveal or discuss and personal or private information in the focus group discussions.

This project is therefore now registered and you can proceed with the work. Please quote the above-mentioned project number in ALL future correspondence. You may start with the project. Notwithstanding this approval, the Committee can request that work on this project be halted temporarily in anticipation of more information that they might deem necessary.

Please note a template of the progress report is obtainable on www.sun.ac.za/rds and should be submitted to the Committee before the year has expired. The Committee will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly and subjected to an external audit.

Translations of the consent document in the languages applicable to the study participants should be submitted.

Federal Wide Assurance Number: 00001372
Institutional Review Board (IRB) Number: IRB0005239

The Health Research Ethics Committee complies with the SA National Health Act No.61 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 Part 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

Please note that for research at primary or secondary healthcare facility permission must still be obtained from the relevant authorities (Western Cape Department of Health and/or City Health) to conduct the research as stated in the protocol. Contact persons are Ms Claudette Abrahams at Western Cape Department of Health (healthres@pgwc.gov.za Tel: +27 21 483 9907) and Dr Hélène Visser at City Health (Helene.Visser@capetown.gov.za Tel: +27 21 400 3981). Research that will be conducted at any tertiary academic institution requires approval from the relevant hospital manager. Ethics approval is required BEFORE approval can be obtained from these health authorities.

07 June 2010 08:23

Page 1 of 2



Fakulteit Gesondheidswetenskappe · Faculty of Health Sciences



Verbind tot Optimale Gesondheid · Committed to Optimal Health
Afdeling Navorsingsontwikkeling en -steun · Division of Research Development and Support
Posbus/PO Box 19063 · Tygerberg 7505 · Suid-Afrika/South Africa
Tel.: +27 21 938 9075 · Faks/Fax: +27 21 931 3352

Appendix 2

12/4/2010



Ministry of Health
and Social Welfare
PO Box 514
Maseru 100

3 June 2010

Mateboho P. Mphana
Master degree candidate
Stellenbosch University

Dear M. P. Mphana,

**Re: HIV/AIDS prevention and care for learners in a Higher Education
Institution in Lesotho**

Thank you for submitting the protocol. The Ministry of Health and Social Welfare Research and Ethics Committee having reviewed your protocol hereby authorizes you to conduct this study among the specified population. The study is authorized with the understanding that the protocol will be followed as stated. Departure from the stipulated protocol will constitute a breach of the permission.

We are looking forward to have a progress report and final report at the end of your study.

Sincerely,

A handwritten signature in dark ink, appearing to read 'M. M. Moteetee', is written over a horizontal line.

Dr. M. M. Moteetee
Chairperson Research and Ethics Committee
Director General
Health Services

Appendix 3

**YOU ARE REQUESTED TO FILL THIS QUESTIONNAIRE AND IT WILL BE
COLLECTED WITHIN 48 HOURS.**

PLEASE BE HONEST. NAMES ARE NOT REQUIRED

Completing this questionnaire is completely voluntary, you are not under any obligation to do so and you will not be punished or disadvantaged in any way if you decide not to complete it.

This questionnaire is intended to determine the current knowledge; you are therefore requested to fill it without consulting any book or source of information.

Personal details

Circle the appropriate answer

- | | |
|--------|----------|
| 1. Age | 1. 15-19 |
| | 2. 20-24 |
| | 3. 25-29 |
| | 4. 30-34 |
| | 5. 35-40 |

- | | |
|--------------|--------|
| 2. Programme | 1. EHP |
| | 2. GNP |
| | 3. MLS |
| | 4. PTP |
| | 5. NA |

3. Year of study 1. 1

2. 2

3. 3

4. Sex 1. Male

2. Female

Knowledge:

Select the most appropriate answer

5. There are people who are HIV-positive in Lesotho

1. true 2. don't know 3. false

6. There are people who are HIV-positive in your Institution

1. true 2. don't know 3. false

7. HIV infection can be prevented

1. true 2. don't know 3. false

8. A person can get HIV by using a cup or plate that has been used by a person with

HIV/AIDS.

1. true 2. don't know 3. false

9. A person can get HIV by sitting in a hot tub or swimming pool with a person who has HIV.

1. true 2. don't know 3. false

10. Having sex with a virgin can cure HIV/AIDS.

1. true 2. don't know 3. false

11. Having sex with more than one partner can increase a person's chance of being infected with HIV/AIDS.

1. true 2. don't know 3. False

12. A person can be infected with HIV and still look healthy.

1. true 2. don't know 3. false

13. People can protect themselves from HIV by using a condom correctly every time they have sex.

1. true 2. don't know 3. false

14. Coughing and sneezing can spread HIV.

1. true 2. don't know 3. false

15. You can get HIV through contact with infected blood.

1. true 2. don't know 3. false

16. A woman who has been raped has a right to receive immediate HIV-preventive treatment.

1. true 2. don't know 3. false

17. A person can get HIV from oral sex (mouth-to-penis or mouth-to-vagina).

1. true 2. don't know 3. false

18. HIV can be transmitted from mother to child through breastfeeding.

1. true 2. don't know 3. false

19. Patients with TB also have HIV.

1. true 2. don't know 3. false

20. HIV-positive persons tend to get TB more easily.

1. true 2. don't know 3. false

21. You would stay with a colleague who is HIV-positive in the same room if you are HIV-negative.

1. true 2. don't know 3. false

22. A person who is HIV-positive needs to be loved and supported.

1. true 2. don't know 3. false

23. HIV-positive mother can have a child who is HIV-negative

1. true 2. don't know 3. false

24. It is possible for one partner to be HIV-negative while the other partner is HIV-positive

1. true 2. don't know 3. false

25. Health-care workers should report any needle-prick that occurs while on duty.

1. true 2. don't know 3. false

26. Life-skills education can help in the prevention of HIV/AIDS

1. true 2. don't know 3. false

27. HIV Testing and Counselling is one of the strategies used in the prevention of HIV/AIDS.

1. true 2. don't know 3. false

28. If your friend is diagnosed HIV-positive your relationship should stop immediately.

1. true 2. don't know 3. false

29. HIV is considered as a chronic disease not as death sentence.

1. true 2. don't know 3. false

30. Once one has started taking ARV treatment for HIV, one has to take it for life.

1. true 2. don't know 3. false

The questionnaire is adopted from ELRC edited by Shisana, O., Peltzer, K., Zungu-Dirwayi, N., and Louw, J.S. 2005 The Health of our Educators. A focus on HIV/AIDS in South African public schools. Page 81-82. Available on www.sahara.org.za, www.elrc.org.za and www.hsrcpress.ac.za

Appendix 4

U KOPUOA HO ARABA LIPOTSO TSE LATELANG PAMPIRING EONA ENA

U KOPUOA HO ARABA KA BOT'SEPEHI. SE NGOLE LEBITSO LA HAU

Ke boikhethelo ba hau ho araba lipotso tsena, ha u oa qobelloa, 'me ha u na ho fumana likotlo tsa mofuta ofe kapa ofe ha u khetha ho se li arabe.

Lipotso tsena li reretsoe ho fumana tsebo eo u nang le eona ha ha joale, u kopuoa ke hona ho se batle likarabo libukeng esita le mehloling e meng.

Lintlha tse amanang le uena

Etsa selikalikoe khethong eo u lumellanang le eona

- | | |
|-------------------|-------------------------|
| 1. Lilemo tsa hau | 1. 15-19 |
| | 2. 20-24 |
| | 3. 25-29 |
| | 4. 30-34 |
| | 5. 35-40 |
| 2. Lefapha | 1. <i>EHP</i> |
| | 2. Booki bo akaretsang |
| | 3. <i>MLS</i> |
| | 4. Botsoaki ba litlhare |
| | 5. Bothusi ba booki |

sesetsa a sebelisitsoeng ke motho ea phelang le t'soatso e joalo.

1. E 2. Ha ke tsebe 3. Che

10. *HIV/AIDS* e ka phekoloa ke ha motho ea phelang le t'soatso a ka robala le motho ea eso ho ka a robala le monna ho hang.

1. E 2. Ha ke tsebe 3. Che

11. Ho arolelana likobo le batho ba fetang bonngoe bo eketsa menyetla ea ho t'soatsoa ke *HIV*

1. E 2. Ha ke tsebe 3. Che

12. Motho a ka bonahala a phetse hantle leha a phela le t'soatso ea *HIV*.

1. E 2. Ha ke tsebe 3. Che

13. Batho ba ka it'sireletsa khahlanong le t'soatso ea *HIV* ka ho sebelisa likhohlopo hantle, ka linako tsohle tsa thobalano.

1. E 2. Ha ke tsebe 3. Che

14. Ho khohlela le ho thimola ho ka fetisa kokoana-hloko ea *HIV*.

1. E 2. Ha ke tsebe 3. Che

15. U ka fumana t'soatso ea *HIV* maling a nang le t'soatso.

1. E 2. Ha ke tsebe 3. Che

16. Mosali ea hlekefelitsoeng ka motabo o na le tokelo ea ho fumana lithethefatsi tse thibelang HIV.

1. E 2. Ha ke tsebe 3. Che

17. Motho a ka fumana t'soaelso ea *HIV* thobalano e etsoang ka litho tsa botona kapa bot'sehali le lehano (*mouth-to-penis or mouth-to-vagina*).

1. E 2. Ha ke tsebe 3. Che

18. T'soaelso ea *HIV* e ka fetisoa ho tloha ho 'm'a ho ea ho lesea le anyang.

1. E 2. Ha ke tsebe 3. Che

19. Bakuli ba lefuba ba na le t'soaelso ea *HIV*.

1. E 2. Ha ke tsebe 3. Che

20. Batho ba nang le t'soaelso ea *HIV* ba t'soaelsoa ke lefuba ha bobebe

1. E 2. Ha ke tsebe 3. Che

21. Na u ka lula le motho ea phelang le t'soaelso ea *HIV* leha uena u sena eona

1. E 2. Ha ke tsebe 3. Che

22. Motho ea phelang le t'soetso ea *HIV* o hloka ho ratoa le ho t'sebetsoa

1. E 2. Ha ke tsebe 3. Che

23. 'M'e ea phelang le t'soetso ea *HIV* a ka beleha ngoana ea senang t'soetso.

1. E 2. Ha ke tsebe 3. Che

24. Ke ntho e ka etsahalang hore ho balekane ba babeli e mong a ka ba le t'soetso ea
HIV empa e mong a sena eona.

1. E 2. Ha ke tsebe 3. Che

25. Basebeletsi ba tsa bophelo ba lokela ho tlaleha ha ba bile le kotsi tse kang tsa ho
hlajoa ke linale nakong ea t'sebetso.

1. E 2. Ha ke tsebe 3. Che

26. Thuto ea mahlale a bophelo (*Life skills*) e ka thusa ho thibela *HIV/AIDS*.

1. E 2. Ha ke tsebe 3. Che

27. Liteko le tlhabollo ea *HIV* (*HIV Testing and Counselling*) ke e 'ngoe ea litsela tseo *HIV* e
ka thibeloang ka tsona.

1. E 2. Ha ke tsebe 3. Che

28. Ha motsoalle oa hau a ena le t'soatso ea *HIV*, setsoalle sa lona se lokela ho fela hang-hang.

1. E 2. Ha ke tsebe 3. Che

29. Ho ba le t'soatso ea *HIV* ho t'soana le mafu a mang a nako e telele ha se hore motho o se a tlilo ho shoa.

1. E 2. Ha ke tsebe 3. Che


30. Motho ha a qala ho sebelisa lithethefatsi tsa *HIV* o se a t'soanela ho li sebelisa bophelo ba hae bohle.

1. E 2. Ha ke tsebe 3. Che

The questionnaire is adopted from ELRC edited by Shisana, O., Peltzer, K., Zungu-Dirwayi, N., and Louw, J.S. 2005 The Health of our Educators. A focus on HIV/AIDS in

South African public schools. Page 81-82. Available on www.sahara.org.za, www.elrc.org.za and www.hsreprpress.ac.za

Appendix 5

 UNIVERSITEIT•STELLENBOSCH•UNIVERSITY jou kennisvennoot • your knowledge partner	Stellenbosch University Nursing Division SUND
---	--

Participant information leaflet and consent form for a quantitative non-clinical study.

Title of the research project: HIV/AIDS prevention and care for learners in a Higher Education Institution in Lesotho.

Student name: 'Mateboho P. Mphana

Address: P.O. Box 10533

Maseru 100

Lesotho

Contact number: 0736616598/ +26658095262

Name of sponsor: National Manpower Development Secretariat-
Government of Lesotho.

HREC Details: Health Research Ethics Committee at Stellenbosch
University

PO Box 19063

Tygerberg

7505

South Africa

Tel. (021) 938 9075

This informed consent form has two parts:

- Information sheet (to share information with you)

- Certificate of consent (for signatures if you choose to participate)

You will be given a copy a full Informed Consent Form

Part 1: Information sheet

Introduction

I am 'Mateboho Mphana, a Masters student at Stellenbosch University. I am doing research on HIV/AIDS prevention and care for learners in a Higher Education Institution in Lesotho. This research has two phases; a quantitative phase and qualitative phase.

I am going to give you information and invite you to be part of this study. Please take some time to read the information presented here, which will explain the details of the project. You can talk to anyone you feel comfortable with about the study before you decide to participate. There may be some words that you may not understand, feel free to ask any question at any time during the presentation and afterwards, I will take time to explain.

This study has been approved by the Health Research Ethics Committee at Stellenbosch University, P.O. Box 19063, Tygerberg 7505 South Africa. Tel: (021) 938 9075. The study will be conducted in a way that all ethical principles, especially, the principle of respect for persons are observed.

Purpose of the study.

As earlier indicated this study has two phases, the quantitative phase and the qualitative phase. The purpose of the quantitative phase is to determine learners' knowledge regarding HIV/AIDS prevention and care.

Type of Research questionnaire

This research will use an adjusted existing questionnaire with closed ended questions to collect data on knowledge regarding HIV/AIDS prevention and care.

Participant selection

I am inviting learners in the basic programmes namely Medical Laboratory Sciences, Pharmacy, General Nursing, Environmental Health and Nursing Assistants, in all years of study to participate.

Voluntary Participation

Your participation in this research is entirely voluntary. You can decide whether or not to participate. You may change your mind later and decide to withdraw from the study even if you had earlier agreed.

Procedures and protocol

You are requested to fill in the questionnaire. The questionnaire has been divided into two parts. The first part consists of the personal information; however names will not be required. The second part consists of close-ended questions on knowledge on HIV/AIDS regarding prevention and care.

Description of the process

During this research, the participants will be responsible for filling the close-ended questionnaire. This process will be done at the specific Higher Education Institution. The participants will be allowed to ask questions whenever they find questions unclear.

Duration

The questionnaire will be filled within 30-45 minutes and this will be done only once with a specific group and the whole process is expected to be finished within two weeks.

Potential side-effects or risks

There are no physical side-effects anticipated. The questionnaire does not seem to carry any questions that may be emotionally sensitive however arrangements have been made for referral to counselling should there be a need.

Potential benefits

The outcome of this study is to propose the recommendations for HIV/AIDS prevention and care programme based on found learners' knowledge and needs. Therefore the expected benefits are the availability of the programme addressing HIV/AIDS issues for learners in the institution where the learners would have had an input. The benefits may not be reaped by the finalists, however other groups may benefit where learners would contribute in the prevention of HIV/AIDS and care for the affected and infected colleagues in the Institution. The Institution will benefit in the long run by the reduction in the incidences of HIV infection and therefore the decline in the HIV prevalence in the Institution.

Protection of participants, justice and confidentiality

As indicated earlier all ethical principles will be observed therefore the information collected from you will in no way be linked to your name. Should you need referral that will be done with your consent and nothing relating to the information collected will be discussed without your consent.

Right to Refuse or withdraw

You have a right to refuse to take part in the study and that will not have any negative impact on you. You may also withdraw from the study at any time during the study if you are no longer comfortable. Your rights will be respected.

Who to contact

If you have any questions, you may ask them now or later. You may contact me at: 58095262, +27736616598 or e-mail mmphana@gmail.com.

Part II - Certificate of consent

Declaration by participant

I,, agree to take part in the research study entitled: HIV/AIDS prevention and care for learners in a Higher Education Institution in Lesotho.

I declare that:

I have read or had this information read for me and it is written in a language with which I am fluent and comfortable. I have had a chance to ask questions and all my questions were adequately answered. I understand that taking part in this study is **voluntary** and I have not been pressurised to take part. I may choose to leave the study at any time and will not be penalised or prejudiced in any way. I may be asked to leave the study before it is finished, if the researcher feels it is to my best interests, or if I do not follow the study plan as agreed on.

Signed at (place)..... on (date).....

Signature of participant..... **Signature of witness**.....

Declaration by researcher

I, 'Mateboho Mphana declare that:

I explained the information in this document to

I encouraged him/her to ask questions and took time to answer them.

I am satisfied that he/she adequately understands all aspects of the research as discussed above. I did not use an interpreter.

Signed at (place) on (date).....

Signature of researcher..... **Signature of witness**.....

Appendix 6

Participant information leaflet and consent form for a qualitative non-clinical study.

Title of the research project: HIV/AIDS prevention and care for learners in a Higher Education Institution in Lesotho.

Student name: 'Mateboho P. Mphana

Address: P.O. Box 10533

Maseru 100

Lesotho

Contact number: 0736616598/ +26658095262

Name of sponsor: National Manpower Development Secretariat-
Government of Lesotho.

HREC Details: Health Research Ethics Committee at Stellenbosch
University

PO Box 19063

Tygerberg

7505

South Africa

Tel. (021) 938 9075

This informed consent form has two parts:

- Information sheet (to share information with you)
- Certificate of consent (for signatures if you choose to participate)

You will be given a copy a full Informed Consent Form

Part 1: Information sheet

Introduction

I am 'Mateboho Mphana, a Masters student at Stellenbosch University. I am doing research on HIV/AIDS prevention and care for learners in a Higher Education Institution in Lesotho. This research has two phases; a quantitative phase and qualitative phase.

I am going to give you information and invite you to be part of this study. Please take some time to read the information presented here, which will explain the details of the project. You can talk to anyone you feel comfortable with about the study before you decide to participate. There may be some words that you may not understand, feel free to ask any question at any time during the presentation and afterwards, I will take time to explain.

This study has been approved by the Health Research Ethics Committee at Stellenbosch University, P.O. Box 19063, Tygerberg 7505 South Africa. Tel: (021) 938 9075. The study will be conducted in such a way that all ethical principles, especially, the principle of respect for persons.

Purpose of the study.

As earlier indicated this study has two phases, the quantitative phase and the qualitative phase. The purpose of the qualitative phase is to explore learners' needs regarding HIV/AIDS prevention and care at a Higher Education Institution in Lesotho.

Type of Research intervention

This research will use focus group discussions, where the researcher will facilitate discussion among the participants. In these discussions there will be no right or wrong answers. Participants will be encouraged to express their views and experiences in a relaxed environment. The focus group discussions will take 45-60 minutes. The number of focus

group discussions will be informed by the time when no more new data comes up, data is repeating itself then we would have reached data saturation.

Participant selection

The focus group discussions will comprise of student leaders, namely: student representative council, religious leaders and leaders for any other associations in the Institution.

Voluntary Participation

Your participation in this research is entirely voluntary. You can decide whether or not to participate. You may change your mind later and decide to withdraw from the study even if you had earlier agreed.

Procedures

You are requested to participate in the focus group discussions. The researcher will guide the discussions by asking some open-ended questions to facilitate discussions. During the discussions a tape-recorder will be used so that what you have said will not be missed but will be utilised during data analysis. The researcher will also take notes during the discussions. **You will not be asked to reveal or discuss any personal or private information during the focus group discussions.** You will have the opportunity to ask the researcher questions on anything that is not clear regarding the questions asked. The researcher will also have an opportunity to ask you to clarify yourselves. This will help to minimise misinterpretations.

Duration

The focus group discussions will take 45-60 minutes per session and the number of the focus group will be governed by the time at which data saturation is reached. The process is expected to last a period of two weeks.

Potential side-effects or risks

There are no physical side-effects anticipated, however the discussions may trigger some emotional responses especially from the infected and /or affected individuals. The arrangements for referral have already been made with the counsellor.

Potential benefits

The outcome of this study is to propose the recommendations for HIV/AIDS prevention and care programme based on found learners' knowledge and needs. Therefore the expected benefits are the availability of the programme addressing HIV/AIDS issues for learners in the institution where the learners would have had an input. The participants will have a platform to discuss HIV/AIDS issues with their colleagues in a friendly, relaxed and non-judgemental environment. Some benefits may not be reaped by the finalists, however other groups may benefit where learners would contribute in the prevention of HIV/AIDS and care for the affected and infected colleagues in the Institution. The Institution will benefit in the long run by the reduction in the incidences of HIV infection and therefore the decline in the HIV prevalence in the Institution.

Protection of participants, justice and confidentiality

As indicated earlier all ethical principles will be observed therefore the information collected from you will in no way be linked to your name. Should you need referral that will be done with your consent and nothing relating to the information collected will be discussed without your consent.

Right to Refuse or withdraw

You have a right to refuse to take part in the study and that will not have any negative impact on you. You may also withdraw from the study at any time during the study if you are no longer comfortable. Your rights will be respected.

Who to contact

If you have any questions, you may ask them now or later. You may contact me at: 58095262, +27736616598 or e-mail mmphana@gmail.com.

Part II - Certificate of consent

Declaration by participant

I,, agree to take in the research study entitled: HIV/AIDS prevention and care in a Higher Education Institution in Lesotho.

I declare that:

I have read or had this information read for me and it is written in a language with which I am fluent and comfortable. I have had a chance to ask questions and all my questions were adequately answered. I understand that taking part in this study is **voluntary** and I have not been pressurised to take part. I may choose to leave the study at any time and will not be penalised or prejudiced in any way. I may be asked to leave the study before it is finished, if the researcher feels it is to my best interests, or if I do not follow the study plan as agreed on.

Signed at (place)..... on (date).....

Signature of participant.....
witness.....

Signature of

Declaration by researcher

I, 'Mateboho Mphana declare that:

I explained the information in this document to

I encouraged him/her to ask questions and took time to answer them.


I am satisfied that he/she adequately understands all aspects of the research as discussed above. I did not use an interpreter.

Signed at (place) on (date).....

Signature **of** **researcher**.....
witness.....

Signature **of**

Appendix 7

 UNIVERSITEIT • STELLENBOSCH • UNIVERSITY jou kennisvennoot • your knowledge partner	Stellenbosch University Nursing Division SUND
---	--

Leqhephe la litlhalosetso le foromo ea tumello ea ba-nka-karolo liphuputsong tse quantitative.

Sehlooho sa liphuputso: *HIV/AIDS prevention and care for learners in a Higher Education Institution in Lesotho.*

Lebitso la mofuputsi: 'Mateboho P. Mphana

Aterese: L/P 10533

Maseru 100

Lesotho

Linomoro tsa mohala: 0736616598/ +26658095262

Mofani oa chelete: National Manpower Development Secretariat-
Government of Lesotho.

Aterese ea HREC: Health Research Ethics Committee at Stellenbosch
University

PO Box 19063

Tygerberg

7505

South Africa

Linomoro tsa mohala: (021) 938 9075

Foromo ena ea tumello ena le likarolo tse peli:

- Karolo ea pele e fana ka tlhalosetso (ho u beha leseling la se lebeletsoeng ho etsahala)
- Karolo ea bobeli ke moo u pakahatsang hore u lumela ho kenya letsoho liphuputsong tsena (ke moo u tla tekena haeba u lumela)

U tla fuoa kopi ea foromo ena ea tumello

Karolo ea pele: Litlhalosetso

Selelekela

Ke 'Mateboho Mphana, moithuti oa lengolo le phahameng (*Masters*) sekolong se seholo sa Stellenbosch. Ke etsa liphuputso ka sehlooho sena “*HIV/AIDS prevention and care for learners in a Higher Education Institution in Lesotho*”, ke hore “Thibelo le tlhokomelo ea lefu la *HIV/AIDS* molemong oa baithuti sekolong sa thuto e phahameng Lesotho”. Liphuputso tsena li mekhahlelo e ‘meli; “*quantitative phase*” le “*qualitative phase*”.

Ke fana ka tlhalosetso hobane ke kopa hore le kenye letsoho liphuputsong tsena. Nka nako ho bala tlhaloso ena e le hore u tsebe ka liphuputso tsena. U ka bua le mang kapa mang eo u ka phuthulohang ho eena pele u ka etsa qeto ea ho ba karolo ea liphuputso tsena. U ka botsa lipotso hona joale kapa neng le neng ‘me ke tla u hlaloesetsa tsohle tseo ebang ha li ea u hlakela tse amanang le liphuputso tsena.

Liphuputso tsena li lumelletsoe ke “*Health Research Ethics Committee*” ea sekolo se seholo sa Stellenbosch, P.O. Box 19063, Tygerberg 7505 South Africa. Linomoro tsa mohala: (021) 938 9075. Liphuputso tsena li tla etsoa ka hlokolosi ho baballa litokelo tsa mantlha tsa botho bathong bohle ba tlang ho kenya letsoho.

Sepheo sa liphuputso

Joalo ka ha ho boletsoe pejana, Liphuputso tsena li mekhahlelo e ‘meli e leng “*quantitative*” le “*qualitative*”. Sepheo sa mokhahlelo ona oa pele ke ho fumana hore na baithuti ba tseba ha kae ka thibelo le tlhokomelo ea lefu lena la *HIV/AIDS*.

Mofuta oa lipotso sebakeng sa liphuputso tsena.

Liphuputsong tsena ho tla sebelisoa lipotso tse kileng tsa sebetsa liphuputsong tse fetileng. Ho tla eketsoa lipotso tse amanang feela le batho bao boithuto bo tla beng bo etsoa ho bona. Ho tla ba le khetho ea likarabo tseo u tlang ho khetha karabo e nepahetseng ho tsona. Lipotso tsena li fuputsa tsebo ea baithuti malebana le thibelo esita le tlhokomelo ea lefu la *HIV/AIDS*.

Khetho ea ba-nka-karolo

Baithuti bohle ba mafapha a latelang ba kopuo ho ba karolo ea liphuputso tsena: booki bo akaretsang, batsoaki ba litlhare, bathusi ba booki, *medical laboratory sciences* le *environmental Health*.

Bolokolohi ba ho khetha hoba karolo ea liphuputso

Hoba karolo ea liphuputso tsena ke boikhetlo ba hau. U na le tokelo ea hore na u ba karolo ea liphuputso tsena kapa che. U lumeletsoe ho fetola maikutlo neng le neng ka hare ho liphuputso le ha u ne u lumetse pele.

Methati e tlang ho lateloa

U kopuo ho araba lipotso tse fanoeng. Lipotso li na la likarolo tse peli. Karolo ea pele e botsa lipotso tse amanang le uena u le moithuti leha hole joalo mabitso ha a hlokahale. Karolo ea bobeli e na le lipotso tse amanang le tsebo ka thibelo le tlhokomelo ea lefu la *HIV/AIDS*.

Tlhaloso ea t'sebetso

Liphuputsong tsena mo-nka-karolo o lebeletsoe hore a arabe lipotso ka ho khetha karabo e nepahetseng ho tse fanoeng. Liphuputso tsena li tla etsoa sekolong se khethehileng ba thuto ea boemo bo phahameng. U lumeletsoe ho botsa moo ebang potso ha e-ea u hlakela.

Nako

Lipotso li ka arajoa ka metsotso e mashome a mararo (30) ho isa ho mashome a mane a metso e mehlano (45). T'sebetso ena e tla etsoa ha 'ngoe sehlopheng ka seng. Nako eo ho lebeletsoeng hore ba-nka-karolo bohle ba be ba arabile lipotso ke libeke tse peli.

Litla-morao tse seng monate

Liphuputso tsena ha lina letho le ka utloisang motho bohloko kapa la eba kotsi 'meleng. Le lipotso tse botsitsoeng ha ho letho leo ho lebeletsoeng hore le ka ama motho maikutlong leha ho le joalo ho se ho entsoe litlhophiso le mohlabolli hae ba ho ka ba le batho kapa motho ea ka amehang maikutlo ke liphuputso tsena.

Melemo ea liphuputso tsena.

Sepheo sa liphuputso tsena ke hore qetellong ho etsoe likhothaletso tsa lenaneo la thibelo le tlhokomelo ea *HIV/AIDS* sebakeng sa baithuti ho ipapisitsoe le tsebo eo baithuti ba nang le eona esita le litlhoko tsa bona. Ka hona molemo oa pele e tla ba boteng ba lenaneo leo le molemong oa baithuti ka kotloloho. Baithuti ba selemong sa ho qetela sa lithuto tsa bona ba ka 'na ba se ke ba fumana molemo ona empa haele baithuti ba bang bona tebello ke hore ba tla utloa monate oa ho hlokomelana ka bo bona 'me le bona ba ena le lentsoe botengng ba lenaneo leo. Sekolo le sona se tla fumana molemo ka phokotseho ea ho ata ha *HIV/AIDS* ho sona.

Polokeho ea toka le lekunutu

Joalo ka ha ho boletsoe pejana litokelo tsohle tsa mantlha tsa botho lit la eloa hloko. Litaba tsohle tse tlang ho bokelloa liphuputsong tsena li na ho amahanngoa le mabitso a batho ba faneng ka tsona. Ha ho etsahala hore ho be le motho ea hlokang ho fetisitsoa ho mohlabolli seo se tla etsoa feela ka tumello ea motho ea amehang. 'Me litaba tseo a faneng ka tsona ho mofuputsi ha li na ho fetela ho mohlabolli haese ka motho ea amehang ka kotloloho kapa ka tumelo ea hae.

Tokelo ea ho hana hoba karolo ea boithuto kapa ho ikhula ka lehare

U na le tokelo ea ho hana ho kenya letsoho liphuputsong tsena se na kotlo ea mofuta ofe kapa ofe. Le ha u ne u se u lumetse ho kenya letsoho boithutong u ntse u ka fetola maikutlo 'me u ke ke oa fua kotlo. Litokelo tsa hau li tla hlompheua ka linako tsohle.

Moo u ka botsang

Ha u ena le lipotso u ka botsa hona joale kapa ha morao. U ka mphumana linomorong tsena tsa mohola: 58095262, +27736616598 kapa oa romela molaetsa ka marang-rang ho mmphana@gmail.com.

Karolo ea bobeli- Bopaki ba tumello

Boitlamo ba mo-nka-karolo

'Na,, ke lumela hore ke kenye letsoho liphuputsong tsa sehlooho sena: *HIV/AIDS prevention and care at a Higher Education Institution in Lesotho*.

Ke tiisa hore:

Ke balile kapa ke baletsoe tlhaloso e ngotsoe ka puo eo ke e tsebang le ho e utloisisa. Ke ile kaba le monyetla oa ho botsa lipotso 'me tsa arajoa ka mokhoa o khotsofatsang. Ke utloisisa hantle hore ke kenya letsoho liphuputsong tsena ka **boikhetlo ba ka** ke sa qobelloa. Nka khetha ho tsoa ka hare ho liphuputso tsena neng le neng ntle ho kotlo ea mofuta ofe kapa ofe. Ke utloisisa hape hore nka lokolloa ka hare ho liphuputso ha mofuputsi a bona ho le molemong oa ka kapa ke sa latele methati eo re lumellaneng ka eona.

E tekenetsoe (sebaka)..... ka la (letsatsi).....

Motekeno oa mo-nka-karolo.....

Motekeno oa paki.....

Boitlamo ba mofuputsi

‘Na, ‘Mateboho Mphana ke tiisa hore:

Ke fane ka tlhaloso eohle e pampiring ena ho

Ke mo kothalelitse ho botsa lipotso ‘me ka li araba.

Ke khotsofetse hore o utloisisa likateng tsa liphuputso tsena.

Ha ke a sebelisa toloko.

E tekenetsoe (sebaka) ka la
(letsatsi).....

Motekeno oa mofuputsi.....

Motekeno oa paki

Appendix 8

Leqhephe la litlhalosetso le foromo ea tumello ea ba-nka-karolo liphuputsong tse *qualitative*.

Sehlooho sa liphuputso:	HIV/AIDS prevention and care for learners in a Higher Education Institution in Lesotho.
Lebitso la mofuputsi:	‘Mateboho P. Mphana
Aterese:	L/P 10533 Maseru 100 Lesotho
Linomoro tsa mohala:	0736616598/ +26658095262
Mofani oa chelete:	National Manpower Development Secretariat- Government of Lesotho.
Aterese ea HREC:	Health Research Ethics Committee at Stellenbosch University PO Box 19063 Tygerberg 7505 South Africa Linomoro tsa mohala: (021) 938 9075

Foromo ena ea tumello ena le likarolo tse peli:

- Karolo ea pele e fana ka tlhalosetso (ho u beha leseling la se lebeletsoeng ho etsahala)

- Karolo ea bobeli ke moo u pakahatsang hore u lumela ho kenya letsoho boithutong bona (ke moo u tla tekena haeba u teng)

U tla fuoa kopi ea foromo ena ea tumello

Karolo ea pele: Litlhalosetso

Selelekela

Ke 'Mateboho Mphana, moithuti oa lengolo le phahameng (*Masters*) sekolong se seholo sa Stellenbosch. Ke etsa liphuputso ka sehlooho sena “*HIV/AIDS prevention and care for learners in a Higher Education Institution in Lesotho*”, ke hore “Thibelo le tlhokomelo ea lefu la *HIV/AIDS* molemong oa baithuti sekolong sa thuto e phahameng Lesotho”. Liphuputso tsena li mekhahlelo e ‘meli; “*quantitative phase*” le “*qualitative phase*”.

Ke fana ka tlhalosetso hobane ke kopa hore u kenye letsoho boithutong bona. Nka nako ho bala tlhaloso ena e le hore u tsebe ka liphuputso tsena. U ka bua le mang kapa mang eo u ka phuthulohang ho eena pele u ka etsa qeto ea ho ba karolo ea liphuputso tsena. U ka botsa lipotso hona joale kapa neng le neng ‘me ke tla u hlaloesa tsohle tseo ebang ha li ea u hlakela tse amanang le liphuputso tsena.

Liphuputso tsena li lumelletsoe ke “*Health Research Ethics Committee*” ea sekolo se seholo sa Stellenbosch, P.O. Box 19063, Tygerberg 7505 South Africa. Linomoro tsa mohala: (021) 938 9075. Liphuputso tsena tla etsoa ka hlokolosi ho baballa litokelo tsa mantlha tsa botho bathong bohle ba tlang ho kenya letsoho.

Sepheo sa liphuputso tsena.

Joalo ka ha ho boletsoe pejana, liphuputso tsena li mekhahlelo e ‘meli e leng “*quantitative*” le “*qualitative*”. Sepheo sa mokhahlelo ona oa bobeli ke ho fumana litlhoko tsa baithuti malebana le thibelo le tlhokomelo ea *HIV/AIDS* likolong tsa boemo bo phahameng Lesotho.

Mokhoa oa t'sebetso

Mokhahlelong ona oa ho tla sebelisoa lihlot'soana tsa lipuisano (*focus group discussions*), moo mofuputsi a tla etella pele lipuisano. Mothating ona ha ho karabo e nepahetseng kapa e fosahetseng, e mong le e mong a ka hlahisa maikutlo a hae a lokolohile. Ha ho na hoba le lipotso tse tlamang hore u bue ka litaba tsa hau tsa lekunutu lipuisanong. Lipuisano litla nka metsotso e mashome a mane a metso e mehlano (45) ho isa ho hora e le 'ngoe. Lenane la lihlot'soana tsena le tla laoloa ke boemo boo ho bona ho seng ho sena maikutlo a macha, e se ele maikutlo e iphetang feela.

Khetho ea ba-nka-karolo mothating ona.

Lihlot'soana tsa lipuisano li tla boptjoa ka baetapele ba baithuti e leng: lekhotsi la boemeli ba baithuti, baetapele ba mekhatlo ea bolumeli esita le baetapele ba mekhatlo eohle e teng moo sekolong.

Bolokolohi ba ho khetha hoba karolo ea liphuputso

Hoba karolo ea liphuputso tsena ke boikhetlo ba hau. U na le tokelo ea hore na u ka kenya letsoho kapa che. U lumeletsoe ho fetola maikutlo neng le neng le ha liphuputso li se ntse li tsoela pele leha u ne u lumetse pele.

Mokhoa oa t'sebetso

U kopuo hoba karolo ea lihlot'soana tsa lipuisano. Mofuputsi o tla tataisa lipuisano ka ho botsa lipotso tse bulehileng. Nakong ea lipuisano ho tla sebelisoa lebanta le hatisang mantsoe (*tape recorder*) ele ho qoba hore se builoeng se tle se lebalehe empa ho etsetsoa hore maikutlo ohle a tle a sebelisoa nakong eo ho hlalojoang se fumanoeng. mofuputsi o tla 'ne a ngola seo eena a se bonang nakong ea lipuisano. **Ha u na ho kopuo hoba bua ka litaba tsa hau tsa lekunutu nakong ea lipuisano tsena.** U lokolohile ho botsa eng kapa eng e sa u hlakelang e amanang le potso e botsitsoeng, 'me u tla arajoa. Mofuputsi le eena o tla botsa holima se builoeng nakong ea lipuisano, hona ho tla thusa ho qoba hore litaba li fetisoa hampe.

Nako

Lipuisano li tla nka metsotso e mashome a mane a metso e mehlano (45) ho isa ho hora sehlot'soana ka seng. Lenane la lihlot'soana le tla laoloa ke boemo boo ho seng ho se maikutlo a macha a hlahellang. Tebello ke hore lipuisano li tla nka libeke tse peli e seng ho feta moo.

Litla-morao tse seng monate

Liphuputso tsena ha bona letho le ka utloisang motho bohloko kapa la eba kotsi 'meleng. Empa ho ka etsahala hore lipuisano li utloise batho ba phelang le t'soatso kapa ba amehileng bohloko maikutlong, ka hona ho se ho entsoe litlhophiso le mohlabolli haeba ho ka ba le batho kapa motho ea ka amehang maikutlo ke liphuputso tsena.

Melemo ea liphuputso tsena.

Sepheo sa liphuputso tsena ke hore qetellong ho etsoe likhonthaletso tsa lenaneo la thibelo le tlhokomelo ea *HIV/AIDS* sebakeng sa baithuti, ho ipapisitsoe le tsebo eo baithuti ba nang le eona esita le litlhoko tsa bona. Ka hona molemo oa pele e tla ba boteng ba lenaneo leo le molemong oa baithuti ka kotloloho. Baithuti ba selemong sa ho qetela sa lithuto tsa bona ba ka 'na ba se ke ba fumana molemo ona empa haele baithuti ba bang bona tebello ke hore batla utloa monate oa ho hlokomelana ka bo bona 'me le bona ba ena le lentsoe botengng ba lenaneo leo. Sekolo le sona se tla fumana molemo ka phokotseho ea ho ata ha *HIV/AIDS* ho sona.

Polokeho ea toka le lekunutu

Joalo ka ha ho boletsoe pejana litokelo tsohle tsa mantlha tsa botho li tla eloa hloko. Litaba tsohle tse tlang ho bokelloa liphuputsong tsena ha li na ho amahanngoa le mabitso a batho ba faneng ka tsona. Ha ho etsahala hore ho be le motho ea hlokang ho fetisitsoa ho mohlabolli seo se tla etsoa feela ka tumello ea motho ea amehang. 'Me litaba tseo a faneng ka tsona ho

mofuputsi ha li na ho fetela ho mohlabolli haese ka motho ea amehang ka kotloloho kapa ka tumelo ea hae.

Tokelo ea ho hana ho ba karolo ea boithuto kapa ho ikhula ka lehare

U na le tokelo ea ho hana ho kenya letsoho liphuputsong tsena ho se na kotlo ea mofuta ofe kapa ofe. Le ha u ne u se u lumetse ho kenya letsoho liphuputsong u ntse u ka fetola maikutlo 'me u ke ke oa fuoa kotlo. Litokelo tsa hau litla hlomphua ka linako tsohle.

Moo u ka botsang

Ha u ena le lipotso u ka botsa hona joale kapa ha morao. U ka mphumana linomorong tsena tsa mohola: 58095262, +27736616598 kapa oa romela molaetsa ka marang-rang ho mmphana@gmail.com.

Karolo ea bobeli- Bopaki ba tumello

Boitlamo ba mo-nka-karolo

'Na,, ke lumela hore ke kenye letsoho liphuputsong tsa sehlooho sena: *HIV/AIDS prevention and care at a Higher Education Institution in Lesotho*.

Ke tiisa hore:

Ke balile kapa ke baletsoe tlhaloso e ngotsoe ka puo eo ke e tsebang le ho e utloisisa. Ke ile kaba le monyetla oa ho botsa lipotso 'me tsa arajoa ka mokhoa o khotsofatsang. Ke utloisisa hantle hore ke kenya letsoho liphuputsong tsena ka **boikhetlo ba ka** ke sa qobelloa. Nka khetha ho tsoa neng le neng ha liphuputso li ntse li tsoela-pele ntle ho kotlo ea mofuta ofe kapa ofe. Ke utloisisa hape hore nka lokolloa pele liphuputso li fela ha mofuputsi a bona ho le molemong oa ka kapa ke sa latele methati eo re lumellaneng ka eona.

E tekenetsoe (sebaka)..... ka la (letsatsi).....

Motekeno oa mo-nka-karolo.....

Motekeno oa paki.....

Boitlamo ba mofuputsi

‘Na, ‘Mateboho Mphana ke tiisa hore:

Ke fane ka tlhaloso eohle e pampering ena ho

Ke mo kothalelitse ho botsa lipotso ‘me ka li araba.

Ke khotsofetse hore o utloisisa likateng tsa boithuto bona.

Ha ke a sebelisa toloko.

E tekenetsoe (sebaka) ka la
(letsatsi).....

Motekeno oa mofuputsi.....

Motekeno oa paki

Appendix 9

Bureau of Statistics

Maseru 100

Lesotho

18th August. 2010

Stellenbosch University

Nursing Division

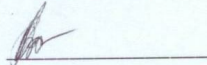
Faculty of Health Sciences

Tygerberg

Re: Processing of Quantitative Data

I, 'Mantoa Molengoane hereby certify that I did the processing of the quantitative data of the thesis titled: HIV/AIDS prevention and care for learners in a Higher Education Institution in Lesotho, for Mrs. 'Mateboho Mphana.

Yours sincerely



'Mantoa Molengoane

Statistician, Bureau of Statistics Lesotho

Certificate in Statistics (NUL), BA Statistics and Economics (NUL), MSc Public Policy and Management (Carnegie Mellon University - South Australia)

E-mail address: mammolengoane@yahoo.com. Cell no. +266-58841730

